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APPROVED

MA Internet Equalities

Awarding Body	University of the Arts London
College	UAL Institute for Creative Computing
School	University of the Arts London
Programme	Institute of Creative Computing (I001) (S)
Course AOS Code	CCIMAINEF01 / D01
FHEQ Level	Level 7 Masters
Course Credits	180
Mode	Full Time, Distance Learning
Duration of Course	1 year
Valid From	September 1st 2021
QAA Subject Benchmark	Art and Design
Collaboration	N/A
UAL Subject Classification	Creative computing
JACS Code	None
UCAS Code	N/A
PSRB	N/A
Work placement offered	N/A
Course Entry Requirements	An applicant will normally be considered for admission if they have achieved an educational level equivalent to an honours degree in either the broad field of science and technology studies, computer science, data science,

	computing, a joint computer sciences and arts/humanities degree, or a closely related subject. Or, from a creative discipline with substantial computational practice such as:
	• Graphic Design
	• Interaction Design
	• Interactive Media Design
	• Web Design
	• Communication Design
	• Digital Design
	• Product Design
	• Educational level may be demonstrated by:
	Honours degree (named above);
	Possession of equivalent qualifications in a design-related or creative discipline;
	Prior experiential learning, the outcome of which can be demonstrated to be equivalent to formal qualifications otherwise required. Your experience is assessed as a learning process and tutors will evaluate that experience for currency, validity, quality and sufficiency;
	Or a combination of formal qualifications and experiential learning which, taken together, can be demonstrated to be equivalent to formal qualifications otherwise required.
	Applicants without the required qualifications, but with professional experience may be eligible to gain credit for previous learning and experience through the AP(E)L system.
Selection Criteria	Sufficient prior knowledge and experience of and/or potential in a specialist subject area to be able to successfully complete the programme of study and have an academic or professional background in a relevant subject.

| | To show a willingness to work as a team player, good language skills in reading, writing and speaking, the ability to work independently and be self- motivated.

Critical knowledge of and enthusiasm for the subject area and capacity for diverse research-led study at the intersection of technology, design, and ethics.

We welcome non-standard applications from diverse applicants and subject fields and applications that make a strong case for how the course could be applied to the ambitions of the applicant in the pursuit of more equitable technology, will be prioritised. |
|---|---|
| **Scheduled Learning and Teaching** | During your course you will engage with learning and teaching that includes both online and face-to-face modes. The advertised scheduled activity for the course will be delivered through a combination of live, synchronous and asynchronous on-line learning. Scheduled learning and teaching activity may include lectures, seminars, studio and workshop briefings, tutorials, external visits and project briefings. |

Awards and Percentage of Scheduled Learning

Year 1

Percentage of Scheduled Learning	16
Awards	**Credits**
Postgraduate Diploma (Exit Only)	120
Master of Arts	180

Course Aims and Outcomes

The Aims and Outcomes of this Course are as follows:

Aim/Outcome	Description
Aim	To equip students with the critical and technical tools to understand and apply principles of equality in technology research and development
Aim	To enable students to be proactive in confronting techno-social problems and facilitate greater diversity of all kinds
Aim	To equip students with the tools to reduce the risk of destructive outcomes that can be brought about by unethical technologies
Aim	To equip students with the applied ethical skills to thrive and effect change within the technology sector and beyond
Aim	To develop students' collaborative and communicative skills
Aim	To develop students' foundational understanding of creative coding
Outcome	Analyse and evaluate how power relations are organized, embedded and perpetuated in internet technologies
Outcome	Synthesise and implement conceptual and technical knowledge of methods for ethical technology development
Outcome	Communicate the intentions, contexts, sources and arguments for experimental work
Outcome	Research and implement emerging practices around inclusion and community approaches to computation
Outcome	Evaluate and assess the efficacy of a range of actions and countermeasures for tackling online harms
Outcome	Produce and critically evaluate practical interventions and their ethical implications, to advocate for the protection or enhancement of human rights as they relate to the internet
Outcome	Collaboratively plan and implement a piece of collective action or online activism that can enhance equality in contemporary society

	Distinctive Features
1	Innovative methods: The course embraces a range of methods that support practice-based ethical technology development. These include Participatory Action Research, Feminist, postcolonial and anarchist Human Computer Interaction, Iterative Design, Grounded Theory and Digital ethnography. This approach distinguishes the course from traditional science and technology studies, expanding the field from the domain of sociology to encompass emerging practices in ethical technology development.
2	Ethics for/as creative practice: The situation of the course within a creative computing context offers a distinctive approach where ethical issues are taken as a design challenge and creative responses are encouraged, taking them beyond critique into practical action. By nature, the course fosters an ethos of collaboration, participation, and interdisciplinary.
3	External links: The course is significantly informed by a network of practitioners working in feminist, technology and activist contexts. Key staff members have founded feminist non-profits Feminist Internet and Code Liberation and have extensive contacts in the field. In line with UAL's commitment to Knowledge Exchange, the course will offer transformative external engagement opportunities for students.
4	UAL Institute environment: This course represents a significant component of the postgraduate provision of the new UAL Institute for Creative Computing, meaning that students have access to a purpose built physical environment and technical support, a public programme that explores the creative computing subject and exposure to creative computing research.
5	Research informed teaching: The course is significantly informed by the research agenda of the Institute within which it sits. It touches directly on the Institute's research theme of 'Platforms, Big Data and Digital Citizenship', examining how the contemporary world is being defined through human computer interaction and social platforms.

Course Detail

MA Internet Equalities explores how power relations and structures of oppression are organized, embedded and perpetuated by internet technologies. It will equip you with critical and technical tools to understand and apply principles of equality in technology research and development, so you can contribute to making the internet and society more equal. We define internet equalities as socio-technical relations that explicitly oppose discrimination on the grounds of race, class, gender, gender identity, sexuality, age, belief or ability. The course will ensure you are proactive in confronting social problems, facilitating greater diversity of all kinds and reducing the risk of destructive outcomes that can be brought about by unethical technologies.

The course offers a choice of units that support three career pathways:

- Research
- Programming
- Social innovation

The course culture is collaborative, open and participatory with an emphasis on peer support and community. You will join a rich research environment at the Creative Computing Institute and work alongside cutting-edge practitioners and researchers working at the intersection of art and design, technology development and ethics.

You will explore a range of interrelated theories including Digital Intersectionality, Post-colonial Science and Technology Studies, Digital Feminism and Queer Theory. You will learn methods including Participatory Action Research, Feminist, post-colonial Human Computer Interaction, Iterative Design, Grounded Theory and Digital Ethnography.

You will work on practical projects and interventions that inform and are informed by the theories and methods taught, positioning you to enter industry as a practitioner or to pursue a research career through PhD progression in this area.

Course Units

Term 1 Units:

1.1 Intersectional Internets (20 Credits)
In this unit you will explore how power relations are organized, embedded and perpetuated in internet technologies, and how this can be resisted. You will examine structures of oppression including hetero-patriarchy, capitalism, colonialism and white supremacy and the ways they intersect with each other. You will learn how scholars and creative practitioners have used frameworks such as digital intersectionality and post-

colonial science and technology studies to push back against these power relations. You will address an internet equality by reviewing and critiquing current discourses and completing a practical intervention.

1.2 Methods for ethical technology development (20 credits)

Supported by seminars, group discussions and exploratory practice, you will prototype and test a method of ethical technology development. You will also present a critique of a relevant theoretical text and its relationship to your practice. Methods covered will include Feminist/post-colonial/anarchist Human Computer Interaction, Participatory Action Research, Iterative Design, and Digital Ethnography. Theories covered will include Digital Feminism, Digital Intersectionality, Postcolonial Science and Technology Studies and Queer Theory.

1.3 Feminist computational practices (20 credits)

In this unit you will be introduced to Javascript, Twitter bots and Python, considering how feminist approaches can frame the practice of coding. This unit has the explicit aim of helping you understand coding skills within a community of practitioners and ensuring you develop a foundation to tackle the rest of the course and orient your coding skills towards ethical technology development.

Term 2/3 Units:

2.1 OPTIONAL: Computational Inequalities (20 Credits)
Building on the feminist computational practices unit, this practical unit explores computational bias in the context of surveillance capitalism and big data. Through supervised studio/lab practice, seminars and independent study, you will learn critical and computational approaches to address forms of discrimination and bias that are reinforced by machine learning systems and the data they are trained on. You will explore alternative, crowdsourced and open forms of data and their potential in creative ethical technology development. You will develop a technical prototype and provide accompanying reflective documentation.

2.2 OPTIONAL: Designing for responsible business and innovation (20 Credits)
This unit incorporates workshops and industry visits to explore the moral and business cases for responsible business and innovation. You will hear from leading experts and practitioners about the history and current landscape of workplace equality. You will critically analyse the role of responsible innovation in building a more equal society, considering its place and scope within small start-ups and global corporations. You will

present a proposal for a business, policy or other intervention that foregrounds responsible innovation or workplace equality.

2.3 Human Rights and Computation (20 Credits)

This unit explores the roles of technology companies, governments, users and the law in making social platforms safe. You will explore legal, human rights and regulatory frameworks surrounding online liability, duty of care and online harms. You will also learn about data protection in the context of surveillance and platform capitalism. You will design an intervention (policy/law change/product/campaign/other) to promote or enhance online safety within a public service or social network.

3.1 Platform Potentials (20 Credits)

On this unit you will use Participatory Action Research and Digital Ethnography. to explore the role of online platforms in social change. You will hear from activists and initiators of online movements and discuss the current contexts of community empowerment, collective resistance, subversion and activism. You will study and present a SWOT analysis of an existing online movement, community or platform.

Term 4 Units:

4.1 Final Major Project (60 Credits) by prototype, project or thesis (pathway option)

Your final major project will take the form of a dissertation, business proposal, speculative design, or technical prototype that advances internet equality.

Learning and Teaching Methods

To enable students to demonstrate achievement against the unit learning outcomes, learning and teaching methods will include:

- Project work
- Peer learning & knowledge exchange
- Collaborative problem-solving & group work
- Studio/lab-based practice & masterclasses
- Industry visits & guest critiques
- Lectures and seminars

Assessment Methods

The assessment strategy for the MA has been designed in accordance with the principles of openness and collaboration that underpin the course. It is a flexible strategy that

supports different pathways through the course. Assessment methods include:

- Project portfolio comprising
  - ○ Technical prototypes
  - ○ Pitches and presentations
  - ○ Documentation of collaborative processes (online, face to face and blended)
- Peer and self-assessment
- Critical essays and articles

Reference Points

QAA **Revised UK Quality Code for HE**

Course Diagram

Week	Term 1										Term 2										Term 3										UAL Summer Period	Term 4
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31-45	

45 Weeks

Intersectional Internets 20 credits	S	Computational Inequalities (Option) 20 credits	S	Platform Potentials 20 credits		Final Major Project 60 Credits
Methods for Equitable Technology Development 20 credits	S	Designing for Responsible Innovation (Option) 20 credits	S		S	
Feminist Coding Practices 20 credits	S	Human Rights and Computation 20 credits			S	

PG DIP Exit Point

MA Exit Point

S = Summative Assessment

Indicative summative assessment weeks are noted in the course diagram. For exact dates please refer to your timetable.

IU000143 : Intersectional Internets (Mandatory)

Unit Code	IU000143
Unit Title	Intersectional Internets
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	20
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	In this unit you will explore how power relations are organized, embedded and perpetuated in internet technologies, and how they can be re-organized or challenged. You will examine how individuals experience intersecting structures of oppression stemming from social phenomena including hetero-patriarchy, capitalism, colonialism and white supremacy. You will learn how scholars and creative practitioners have used frameworks such as Intersectional Critical Race Technology Studies, Digital Feminism, Queer Theory and Postcolonial Science and Technology Studies, as well as creative and activist practices, to push back against and transcend these structures of oppression.
Indicative Content	• Theorising internet equalities • Intersecting oppressions and power relations • Creative and activist forms of resistance
Learning & Teaching Methods	• Lectures and seminars, supported where appropriate by critiques and visits • Class-based workshops and assignments • Group work, peer learning and knowledge exchange

Learning Outcomes	
LO1	Analyse and evaluate how power relations are organized, embedded and

	perpetuated in internet technologies (Enquiry)
LO2	Synthesise and critically analyse how internet inequalities have been theorised (Knowledge)
LO3	Synthesise and critically analyse creative forms of resistance (Knowledge)
LO4	Produce and critically evaluate a speculative intervention and its ethical implications (Process)

Unit Assessment Summary

Holistic – This unit is assessed holistically (100% of the unit). Assessment will be against the specified marking criteria.

Holistic

Assessment Type	Holistic
% of total	100
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	Critical writing (not less than 2,400 words) in the form of 2 critical blog posts as directed in the unit brief.

Scheduled Learning and Teaching

Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system.
Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Reading List	Anderson, M. L & Collins, P. H. (2018) *Race, Class, and Gender: Intersections and Inequalities.* CENGAGE Learning Custom Publishing.

Arora, P. (2019) *The Next Billion Users: Digital Life Beyond the West*. Cambridge, MA: Harvard University Press.

Benjamin, Ruha. (2019) *Race After Technology*. Cambridge, UK: Polity Press.

Chun, W. (2006) *Control and Freedom: Power and Paranoia in the Age of Fiber Optics.* Cambridge, MA: MIT Press.

Equality Act 2010 c.15 Available at: https://www.legislation.gov.uk/ukpga/2010/15/contents (Accessed 3 March 2020)

Hall, D. E, & Jagose, A., eds. (2012) *The Routledge Queer Studies Reader*. New York, NY: Routledge.

Haraway, D. (1991) *Simians, Cyborgs and Women: The Reinvention of Nature.* New York, NY: Routledge, and London: Free Association Books.

Jarrett, K. (2015) *Feminism, Labour and Digital Media.* New York: NY, Routledge.

Hare, S. (2020) *Technology Ethics.* London: London Publishing Partnership.

Nakamura, L. & Chow-White, P.A. (2012) *Race After the Internet*.

New York, NY: Routledge.

Umoja Noble, S. & Tynes, B, M. (2016) *The Intersectional Internet: Race, Sex, Class and Culture Online.* New York, NY: Peter Lang Publishing.

Wajcman J. (2004), *Technofeminism.* Cambridge, MA: Polity Press.

Further Reading

Fisher, M. (2009) *Capitalist Realism, Is There No Alternative?* Hants: UK: Zero Books.

Hester, H. (2018) *Xenofeminism.* Cambridge: Polity Press.

McNeil, J. (2020) *Lurking: How a Person Became a User.* MCD.

Nguyen, M. (2003). 'Queer cyborgs and new mutants: Race, sexuality and prosthetic sociality in digital space', in R. Lee & S.-L. Wong (eds.), *AsianAmerica.net* (pp. 281–305). New York: Routledge Press.

Periodicals

Feminist Studies

	Gender and Society
	Media, Culture and Society
	Ada New Media
	Theory, Culture and Society
	Web Refs:
	Ada Lovelace Institute https://www.adalovelaceinstitute.org/
	Cyberfeminism Index https://monoskop.org/Cyberfeminism
	Institute of Network Cultures https://networkcultures.org/
	Tactical Tech https://tacticaltech.org/
	Superrr https://superrr.net/
	Triple Cripples https://www.youtube.com/watch?v=-JOSVUX5FEg&feature=youtu.be
	Xenofeminist Manifesto http://www.laboriacuboniks.net/#zero

IU000144 : Methods for Equitable Technology Development

(Mandatory)

Unit Code	IU000144
Unit Title	Methods for Equitable Technology Development
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	20
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	Supported by seminars, workshops and exploratory practice, this unit will build a methodological foundation for engaging and experimenting with internet equalities and ethical technology development. Methods covered will include Social and Participatory Design, Feminist, Post-colonial and Anarchist Human Computer Interaction, Digital Ethnography and Design Justice. You will test methods in class and through independent creative practice, and present a written critique of the methods learned throughout the unit.
Indicative Content	- Participatory Design - Feminist/post-colonial/anarchist/queer HCI - Digital Ethnography - Digital Methods - Design Justice
Learning & Teaching Methods	- Lectures and seminars, supported where appropriate by critiques and visits - Class-based workshops and assignments - Group work, peer learning and knowledge exchange

Learning Outcomes	
LO1	Critically analyse and evaluate methods for ethical technology development (Enquiry)

LO2	Synthesise practical, conceptual and technical knowledge of methods for ethical technology development (Knowledge)
LO3	Experiment with methods for ethical technology development (Process)
LO4	Communicate the intentions, contexts, sources and arguments for your experimental work (Communication)

Unit Assessment Summary
Holistic – This unit is assessed holistically (100% of the unit). Assessment will be against the specified marking criteria.

Holistic	
Assessment Type	Essay
% of total	100
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	Academic essay: you will write an academic essay of 2000 words, as directed by the unit brief.

Scheduled Learning and Teaching
Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system. Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Reading List	Essential Reading
	Bogers, L. and Chiappini, L. (eds). (2019) *Critical Makers Reader (Un)Learning Technology.* Institute of Network Cultures, Amsterdam.

Costanza-Chock, S. (2020) *Design Justice: Community-Led Practices to Build the Worlds We Need.* Cambridge, MA: MIT Press.

Greenfield, A. (2017) *Radical Technologies: The Design of Everyday Life* Brooklyn, NY: Verso.

Jaggar, A. (ed) (2014) *Just Methods: An Interdisciplinary Feminist Reader*, 2nd edition. Boulder: Paradigm Publishers.

Kim. D. (1999) *Introduction to Systems Thinking.* Waltham, MA: Pegasus Communications. Available at: https://thesystemsthinker.com/wp-content/uploads/2016/03/Introduction-to-Systems-Thinking-IMS013Epk.pdf (Accessed 16 April 2020).

Lee, U. and Toliver, D. (2017) *Building Consentful Tech.* And Also Too, available at: https://www.andalsotoo.net/2017/10/24/the-building-consentful-tech-zine-is-out/ (Accessed 26 November 2019)

Papanek, V. (1971). *Design for the Real World: Human Ecology and Social Change*, New York, Pantheon Books.

Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T., Tacchi, J. (2015) *Digital Ethnography: Principles and Practice.* London: Sage.

Further Reading

Bardzell. S. (2010). 'Feminist HCI: Taking Stock and Outlining an Agenda for Design', in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '10). ACM, New York, USA, pp.1301-1310.

Browne, K. and Nash, C. J. (2010) *Queer Methods and Methodologies: Intersecting Queer Theories and Social Science Research.* Surrey: Ashgate.

Haraway, D. (1988), "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective". In: *Feminist Studies*, Vol. 14, No. 3. (Autumn, 1988), pp. 575-599.

Irani L., Vertesi J., Dourish, P. Philip, K. and E. Grinter, R. (2010). 'Postcolonial Computing: A Lens on Design and Development'*,* in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '10). ACM, New York, USA, pp.1311-1320.

Meadows, D. (2008) *Thinking in Systems: a Primer*. Vermont: Chelsea Green Publishing.

Meadows, D. H., Meadows, D. L., Randers, J. and Behrens III, W. (1972) *Limits to Growth*, New York: Universe Books. Available at: http://donellameadows.org/wp-content/userfiles/Limits-to-Growth-digital-scan-version.pdf (Accessed 16 April 2020).

W3C (2019) *Accessibility Standards Overview*. Available at: https://www.w3.org/WAI/standards-guidelines/ (Accessed 18

	February 2020).

Periodicals

International Journal of Qualitative Studies in Education

Qualitative Inquiry

ACM Digital Library

Web Refs

Art and Feminism http://www.artandfeminism.org/

Global Media and Technologies & Cultures Lab http://globalmedia.mit.edu/

Special Interest Group on Computer Human Interaction https://sigchi.org/

FemTechNet http://femtechnet.org/ |

IU000145 : Feminist Coding Practices (Mandatory)

Unit Code	IU000145
Unit Title	Feminist Coding Practices
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	20
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	In this unit you will be introduced to relevant contemporary coding languages, considering how feminist approaches can frame the practice of coding. This unit has the explicit aim of helping you understand coding skills within a community of practitioners and ensuring you develop a foundation to tackle the rest of the course and orient your coding skills towards ethical technology development. You will also consider the roles data and data analysis play in the development of technologies and techno-social systems.
Indicative Content	• Create text driven audio applications and twitter bots • Implement and modify simple databases • Use and experiment with AI algorithms • Computational media techniques • Data & digital methods
Learning & Teaching Methods	• Class-based workshops and assignments, supported where appropriate by lectures, seminars, critiques and visits. • Group work, peer learning and knowledge exchange

Learning Outcomes	
LO1	Integrate, and deploy algorithms using web technologies, databases and networks (Enquiry)
LO2	Research and implement emerging practices around inclusion and community

	approaches to computation (Process)
LO3	Critically discuss issues around computational practice and representation (Knowledge)
LO4	Discuss and present creative work within the context of feminist computational practices (Realisation)

Unit Assessment Summary
Holistic – This unit is assessed holistically (100% of the unit). Assessment will be against the specified marking criteria

Elemental	
Assessment Type	Artefact
% of total	100
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	You will submit a portfolio project as directed by the unit brief.

Scheduled Learning and Teaching
Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system. Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Reading List	**Essential Reading**
	McCarthy, L., Reas, C & Fry, B. (2015) *Getting Started with p5.js: Making Interactive Graphics in JavaScript and Processing*. San Francisco, CA: Maker Media.

Gross, B., Bohnacker, H., Laub, J., & Lazzeronim C. (2018) *Generative Design: Visualize, Program, and Create with JavaScript in p5.js*. New York, NY: Princeton Architectural Press.

Simpson, K. (2015) *You Don't Know JS: Up & Going.* 1st edition, Sebastopol, CA: O'Reilly Media.

Posavec, S., & Lupi, G. (2016) *Dear Data.* UK: Particular Books.

Further reading

Colman, F., Bühlmann, V., O'Donnell, A. and van der Tuin, I. (2018). *Ethics of Coding: A Report on the Algorithmic Condition* [EoC]. H2020-EU.2.1.1. – INDUSTRIAL LEADERSHIP – Leadership in enabling and industrial technologies – Information and Communication Technologies. Brussels: European Commission. 732407. Available at: https://cordis.europa.eu/project/rcn/207025_en.html. (Accessed 15 April 2020)

D'Ignazio, C. and F. Klein, L., (2020) *Data Feminism.* Cambridge, MA: MIT Press.

Dunbar Hester, C. (2020) *Hacking Diversity: The Politics of Inclusion in Open Technology Cultures.* NJ: Princeton University Press.

Hottinger, S. N. (2016) *Inventing the Mathematician Gender, Race, and Our Cultural Understanding of Mathematics.* Albany, NY: SUNY Press.

Penny, S. (2017) *Making Sense* Cambridge, MA: MIT Press

Rogers, R. (2013) Digital Methods. Cambridge, MA: MIT Press.

Web references

http://www.P5.js

http://www.generative-gestaltung.de/

https://datasociety.net/

https://ainowinstitute.org/

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide

Periodicals
Neural http://neural.it/

Rhizome https://rhizome.org/

IU000146 : Computational Inequalities (Elective)

Unit Code	IU000146
Unit Title	Computational Inequalities
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	20
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	Building on the Feminist Coding Practices unit, you will explore subjects like AI bias using relevant technical coding frameworks that underpin contemporary machine learning systems. Through supervised studio/lab practice, technical workshops, seminars and independent study, you will learn critical and computational approaches to address forms of discrimination and bias that are reinforced by machine learning systems and the data they are trained on. You will explore alternative, crowdsourced and open forms of data and their potential in creative ethical technology development. You will develop a technical prototype and provide accompanying reflective documentation.
Indicative Content	• AI bias - history, context, algorithms • Data and training sets • Open & feminist data • Algorithmic accountability
Learning & Teaching Methods	• Lectures and seminars, supported where appropriate by critiques and visits • Class-based workshops and assignments • Group work, peer learning and knowledge exchange

Learning Outcomes	
LO1	Analyse and evaluate diverse, complex practices, concepts and theories around

	computational inequality (Enquiry)
LO2	Define, create and implement your own dataset (Process)
LO3	Create and critically evaluate the implications of a prototype that addresses a computational inequality (Process)
LO4	Communicate about the intentions, contexts, sources and arguments surrounding your prototype (Communication)

Unit Assessment Summary

Element – The assessment for this unit is weighted. In element-based assessment, you must achieve at least an E grade in each element, and an aggregate grade of at least D- in the overall unit. Failure (F, or F-), or non-submission in any element defaults to Fail for the unit. Assessment will be against the specified marking criteria.

Elemental

Assessment Type	Multiple
% of total	50
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	Element 1: a technical prototype and reflective documentation.

Elemental

Assessment Type	Essay
% of total	50
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	Element 2: an academic essay of at least 2000 words.

Scheduled Learning and Teaching

Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system.

Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Reading List	**Essential Reading**
	Boyd, d., & Crawford, K. (2012). Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon, in Information, Communication & Society, 15(5), 662–679. Available at: https://www-tandfonlinecom.proxy.libraries.rutgers.edu/doi/pdf/10.1080/1369118X.2012.678878 (Accessed 17 December 2019).
	Whittaker, M., Alper, M., Bennett, C L., Hendren, S., Kaziunas, L., Mills, M., Ringel Morris, M., Rankin, J., Rogers, E., Salas, M. and Myers West, S. (2019) Disability, Bias, and AI. New York: AI Now Institute, Available at: https://ainowinstitute.org/disabilitybiasai-2019.pdf (Accessed 17 December 2019).
	Eubanks, V. (2018) Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor. New York, NY: St. Martin's Press.
	Noble, S. (2018). Algorithms of Oppression: How Search Engines Reinforce Racism. New York: NYU Press.
	O'Neill, C. (2016) Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. London: Penguin Random House.
	Further Reading

Amaro, R. (no date) As If. E-flux journal. Available at: https://www.e-flux.com/architecture/becoming-digital/248073/as-if/ (Accessed 17 December 2019).

Burrell, J. (2016) 'How the machine 'thinks': Understanding opacity in machine learning algorithms' in Big Data & Society 3:1, pp. 1–12.

Gieseking, J. J. (2017) 'Messing with the attractiveness algorithm: A response to queering code/space' in Gender, Place & Culture 24:11, pp. 1659-1665.

Just, N. and Latzer, M. (2016) 'Governance by algorithms: reality construction by algorithmic selection on the Internet', in Media, Culture and Society, 39:2, pp. 238-258.

Stark, L. and Crawford, K. (2019). 'The Work of Art in the Age of Artificial Intelligence: What Artists Can Teach Us About the Ethics of Data Practice', in Surveillance & Society, 17(3/4): pp. 442-455.

Periodicals

Big Data and Society

Parametric Press

Web Refs

AI Now Institute https://ainowinstitute.org/

Algorithmic Justice League https://www.ajlunited.org/

Algorithm Watch https://algorithmwatch.org/

Antibias https://antibias.webflow.io/

Data Justice Lab https://datajusticelab.org/

Data Society https://datasociety.net/

Feminist AI https://www.feminist.ai/

Unbias https://unbias.wp.horizon.ac.uk/our-mission/

IU000147 : Designing for Responsible Innovation (Elective)

Unit Code	IU000147
Unit Title	Designing for Responsible Innovation
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	20
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	Building on the Methods for Ethical Technology Development unit, this practical unit explores the social and economic cases for responsible business and innovation. You will critically analyse the role of responsible innovation in building a more equal society, considering its place and scope within small start-ups and global corporations. You will explore strategies of change including social and political entrepreneurship, activism and grassroots organization, and how they intersect with feminist approaches to innovation. You will also explore the role of workplace equality and labour relations in creating and maintaining ethical organisations. You will develop a proposal for an organisation, project or other intervention that uses a responsible innovation approach to address a social inequality.
Indicative Content	• History of responsible innovation • Current theories and practices of responsible innovation • Feminist approaches to social change • Workplace equality and labour relations
Learning & Teaching Methods	• Lectures, case studies, industry visits and assignments, supported where appropriate by placements, studio-based workshops, seminars, critiques and visits

	• Group work, peer learning and knowledge exchange

Learning Outcomes	
LO1	Analyse and evaluate diverse, complex practices, concepts and theories around responsible innovation (Enquiry)
LO2	Critically evaluate the socio-economic case for responsible innovation (Enquiry)
LO3	Propose and critically evaluate an organisation, project or other intervention that uses a responsible innovation approach to address a social inequality (Process)
LO4	Communicate about the intentions, contexts, sources and arguments surrounding your proposed intervention (Communication)

Unit Assessment Summary
Element – The assessment for this unit is weighted. In element-based assessment, you must achieve at least an E grade in each element, and an aggregate grade of at least D- in the overall unit. Failure (F, or F-), or non-submission in any element defaults to Fail for the unit. Assessment will be against the specified marking criteria.

Elemental	
Assessment Type	Proposal
% of total	50
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	Element 1: a proposal as directed by the project brief.
Elemental	
Assessment Type	Essay
% of total	50
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief

Feedback	Refer to Assignment Brief
Assessment Description	Element 2: an academic essay of at least 2000 words

Scheduled Learning and Teaching
Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system. Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Reading List	Essential Reading
	Bohnet, I. (2016) *What Works: Gender Equality by Design*. Cambridge, MA: Harvard University Press.
	Godin (2015). *Innovation contested: The idea of innovation over the centuries*. New York, NY: Routledge.
	Hyman, L. (2018) *Temp: How American Work, American Business, and the American Dream Became Temporary.* New York, NY: Viking.
	Kessler, S. (2019) *Gigged: The Gig Economy, the End of the Job and the Future of Work,* 2nd edition. Random House Business.
	Owen, R., Heintz, M. & Bessant, J. (eds.) (2013) *Responsible innovation.* London: Wiley.
	Smith, A., Fressoli, M., Abrol, D., Arond, E. & Ely, A. (2017) *Grassroots Innovation Movements (Pathways to Sustainability).* New York, NY: Routledge.
	Further reading
	Heintz, J. (2019) *The Economy's Other Half: How Taking Gender Seriously Transforms Macroeconomics (Gendered Economy).* Newcastle, UK: Agenda.
	International Development Innovation Alliance (IDIA) (2018)

Toward Bridging Gender

Equality & Innovation. Available at: https://www.idiainnovation.org/idia-insights (Accessed 6 December 2019).

Irani, L. (2019) *Chasing Innovation: Making Entrepreneurial Citizens in Modern India (Princeton Studies in Culture and Technology).* Princeton, NJ: Princeton University Press.

Lee, U. and Toliver, D. (2017) *Building Consentful Tech.* And Also Too, available at: https://www.andalsotoo.net/2017/10/24/the-building-consentful-tech-zine-is-out/ (Accessed 26 November 2019).

Pryce, V. (2019) *Women vs Capitalism: Why We Can't Have It All in a Free Market Economy.* London: Hurst and Company.

Periodicals

Orbit Journal
Journal of Responsible Innovation

Gender, Work and Organization.

Web refs

Doteveryone https://www.doteveryone.org.uk/

Fast Company Innovation By Design Awards https://www.fastcompany.com/90389166/innovation-by-design-2019-winners

Gender at Work https://genderatwork.org/

Waag Technology & Society https://waag.org/
Orbit https://www.orbit-rri.org/

IU000157 : Human Rights and Computation (Mandatory)

Unit Code	IU000157
Unit Title	Human Rights and Computation
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	20
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	This unit explores the roles of technology companies, governments, regulators, civil society and the law in protecting human rights including freedom of expression, privacy and safety on the internet. You will address the question of how organisations and individuals involved in building, maintaining and consuming internet technologies can actively internalise and implement human rights principles in order to uphold democracy. You will explore legal, ethical and regulatory frameworks surrounding human rights violations such as hate speech and discriminatory automated decision making. The unit will explore how artists, activists and civil society have developed technological, political and aesthetic countermeasures to tackle human rights violations in online spaces. You will also learn about data protection and privacy in the context of surveillance and platform capitalism, exploring issues of informed consent, redress and human intervention in automated systems. You will design an activist project or work of intellectual activism that advocates for the protection or enhancement of human rights as they relate to the internet.
Indicative Content	- Human rights - Online human rights violations - Internet legislation and regulation - Data protection and privacy - Countermeasures for tackling online human rights

	violations
Learning & Teaching Methods	• Lectures and seminars, supported where appropriate by critiques and visits • Class-based workshops and assignments • Group work, peer learning and knowledge exchange

Learning Outcomes

LO1	Synthesise and critically analyse critical debates surrounding internet regulation and governance (Knowledge)
LO2	Evaluate and assess the efficacy of a range of actions and countermeasures for tackling online harms (Enquiry)
LO3	Produce and critically evaluate a practical intervention and its ethical implications, to advocate for the protection or enhancement of human rights as they relate to the internet (Process)
LO4	Communicate the intentions, contexts, sources and arguments for your experimental work (Communication)

Unit Assessment Summary

Element – The assessment for this unit is weighted. In element-based assessment, you must achieve at least an E grade in each element, and an aggregate grade of at least D- in the overall unit. Failure (F, or F-), or non-submission in any element defaults to Fail for the unit. Assessment will be against the specified marking criteria.

Elemental

Assessment Type	Other
% of total	30
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	**Element 1: Critical writing (not less than 1500 words) in the form of a critical blog post as directed in the unit brief.**

Elemental	
Assessment Type	Portfolio
% of total	70
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	**Element 2: A portfolio project as directed in the unit brief.**

Scheduled Learning and Teaching
Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system. Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Read ing List	Essential Reading
	Crawford, K., Roel D., Dryer, T., Fried, G., Green, B., Kaziunas, E., Kak, A., Mathur, V., McElroy, E., Nill Sánchez, A., Raji, D., Lisi Rankin, J., Richardson, R., Schultz, J., Myers West, S. and Whittaker, M. (2019) *AI Now 2019 Report.* New York: AI Now Institute, Available at: https://ainowinstitute.org/AI_Now_2019_Report.html (Accessed 13 December 2019). Citron, D. K. (2016) *Hate Crimes in CyberSpace.* Cambridge, MA: Harvard University Press. Department for Digital, Culture, Media & Sport (2019) *Online Harms White Paper* (cp57), available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/793360/Online_Harms_White_Paper.pdf (Accessed: 26 November 2019).

European Commission (2019) *Ethics guidelines for trustworthy AI.* Available at: https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai (Accessed: 13 December 2019).

Kaye, D. (2019) *Speech Police: The Global Struggle to Govern the Internet.* New York, NY: Columbia Global Reports.

Massey, J. Ohrvik-Stott, J., & Miller, C. (2019) *Better Redress, building accountability for the digital world: an evidence review from*

Doteveryone. Available at: https://www.doteveryone.org.uk/wp-content/uploads/2019/12/Better-redress-evidence-review.pdf (Accessed 13 December 2019).

United Nations (1952) *UN Declaration of Human Rights.*

United Nations Human Rights (2011) *Guiding principles on business and human rights.* New York and Geneva: United Nations.

Zuboff, S. (2019) *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power.* London: Profile Books.

Further reading

The Cleaners (2018), Directed by H. Block and M. Riesewieck [Documentary] Germany: Gebrueder Beetz Filmproduktion.

Guardian (2017) *Facebook Files.* Available at:
https://www.theguardian.com/news/series/facebook-files (Accessed 13 December 2019).

Roberts, S. (2019) *Behind the Screen: Content Moderation in the Shadows of Social Media.* New Haven, CT: Yale University Press.

Susskind, J. *Future Politics: Living Together in a World Transformed by Tech.* Oxford: Oxford University Press.

Yeung, K. (2018). 'Algorithmic regulation: A critical interrogation' in *Regulation & Governance*, Vol.12, pp: 505–523.

Periodicals

Ethics and Information Technology

Surveillance and Society

Technology & Philosophy

Web refs

Centre for Data Ethics & Innovation
https://www.gov.uk/government/organisations/centre-for-data-ethics-and-innovation

Centre for Feminist Foreign Policy https://centreforfeministforeignpolicy.org/

GDPR http://gdpr-legislation.co.uk/

Government Office for Artificial Intelligence

https://www.gov.uk/government/organisations/office-for-artificial-intelligence

IEEE Standards Association https://standards.ieee.org/
Internet Governance Forum https://www.intgovforum.org/
Internet Society https://www.internetsociety.org/

Open Rights Group https://www.openrightsgroup.org/

RightsCon https://www.rightscon.org/

Tech UK https://www.techuk.org/

The Ethics and Governance of Artificial Intelligence Initiative https://aiethicsinitiative.org/

World Wide Web Foundation https://webfoundation.org/

IU000149 : Platform Potentials (Mandatory)

Unit Code	IU000149
Unit Title	Platform Potentials
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	20
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	In this unit you will explore the role of internet platforms, cultures and communities in bringing about social change. The topic will be introduced through theoretical readings and discussions, as well as practical case studies. You will hear from artists, activists and initiators of online movements and examine current practices of online community empowerment, collective resistance, subversion and activism. You will explore tactics and goals of internet activism, and consider their value and effectiveness at intervening in dominant political orders. You will study and present an analysis of an existing online movement, community or platform, and small groups will develop and present your own activist project or coordinated action.
Indicative Content	• Tactics and goals of online activism • Online movements that shifted public discourse • Controversies in online activism • Aesthetics strategies in online activism
Learning & Teaching Methods	• Lectures and seminars, supported where appropriate by critiques and visits • Class-based workshops and assignments • Group work, peer learning and knowledge exchange

Learning Outcomes	
LO1	Synthesise and critically analyse cases of online activism and collective action

	(Knowledge)
LO2	Experiment with and critically evaluate methods of online activism, considering their efficacy, results and implications (Process)
LO3	Collaboratively plan and implement a piece of collective action or online activism that can enhance equality in contemporary society (Realisation)
LO4	Communicate about the intentions, contexts, sources and arguments surrounding your proposed intervention (Communication)

Unit Assessment Summary
Element – The assessment for this unit is weighted. In element-based assessment, you must achieve at least an E grade in each element, and an aggregate grade of at least D- in the overall unit. Failure (F, or F-), or non-submission in any element defaults to Fail for the unit. Assessment will be against the specified marking criteria.

Elemental	
Assessment Type	Group Project
% of total	70
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	**Element 1: Group project as directed in the unit brief**

Elemental	
Assessment Type	Other
% of total	30
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	Element 2: An activist project or coordinated action developed in response to the unit brief.

Scheduled Learning and Teaching

Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system.

Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Reading List	**Essential Reading**
	Bartlett, J (2018) *The People Vs Tech - How the internet is killing democracy (and how we save it).* London: Penguin.
	Beyer, J. L. (2014) *Expect Us: Online Communities and Political Mobilization (Oxford Studies in Digital Politics*). Oxford: Oxford University Press.
	Boyd, A. (2016) *Beautiful Trouble: A Toolbox for Revolution*. OR Books.
	Castells, M. (2015) *Networks of Outrage and Hope: Social Movements in the Internet Age*. Cambridge, UK: Polity Press.
	Coleman, G. (2014) *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous.* London: Verso.
	Jenkins, H., Green, J. and Ford, S. (2013) *Spreadable Media: Creating Value and Meaning in a Networked Culture.* New York: NYU Press.
	McCaughey, M. and Ayers, M. D. (2003) *Cyberactivism: Online Activism in Theory and Practice.* New York, NY: Routledge.
	Raley, R. (2009) *Tactical Media.* University of Minnesota Press

Vivienne, S (2016) *Digital Identity and Everyday Activism - Sharing Private Stories with Networked Publics*. Basingstoke: Palgrave MacMillan.

Further reading

Bonilla, Y. and Rosa, J. (2015) '#Ferguson: Digital protest, hashtag ethnography, and the racial politics of social media in the United States' in *American Ethnologist* 4(16) pp. 4 - 17.

Critical Art Ensemble (2012) *Disturbances*. Four Corners.

Daniels, J. (2018) 'The algorithmic rise of the "alt-right"' in *Context*, 17(1): 60-65. Available at: http://journals.sagepub.com/doi/abs/10.1177/1536504218766547 (Accessed 19 December 2019).

Ghonim, W. (2013) *Revolution 2.0: The Power of the People is Greater Than the People in Power: A Memoir.* New York: Houghton Mifflin Harcourt.

Harvey, A. (2019) 'Tits or GTFO: The Aggressive Architecture of the Internet' in: *Flowjournal.org*. Available at: http://www.flowjournal.org/2019/05/tits-or-gtfo-the-aggressive-architecture-of-the-internet-alison-harvey-university-of-leicester/#identifier_2_37691 (Accessed 19 December 2019).

Jane, E. (2017) ''Dude … stop the spread': antagonism, agonism, and #manspreading on social media' in *International Journal of Cultural Studies*, Vol. 20(5): 459–475.

Jenkins, H. (2006) *Confronting the Challenges of Participatory Culture: Media*

Education for the 21st Century (Part One). Available at:
http://henryjenkins.org/blog/2006/10/confronting_the_challenges_of.html.

Periodicals

New Media + Society

Journalism

Technology in Society

Web references

Critical Art Ensemble http://critical-art.net/

Everyday Sexism https://everydaysexism.com/

Change.org https://www.change.org/

IU000150 : Final Major Project (Mandatory)

Unit Code	IU000150
Unit Title	Final Major Project
FHEQ Level	Level 7
Effective From	September 1st 2020
Duration	1
Credits	60
Programme	Institute of Creative Computing (I001) (S)
Unit Introduction	This unit gives you the opportunity to develop an advanced project and write an associated thesis addressing an internet inequality. This project is expected to be a progressive application of critical and/or creative approaches to ethical technology development, and an exposition in writing of the theoretical underpinnings, practical development and social aims of the project. Prior to the summer break, you will undertake a project proposal phase which includes agreeing the creative and social ambitions of the project and importantly agreeing its practical scope. With these approved you will be supported to develop a project development plan with significant waypoints and feedback/testing stages. Team projects are actively encouraged and in this we would expect a written evaluation of your individual contribution to be included for submission.
Indicative Content	• Advanced proposal writing and project planning • Advanced creative project delivery • Self-directed stakeholder research • Research informed critical practice
Learning & Teaching Methods	• Individual and group tutorials • Seminars • Presentations

Learning Outcomes	
LO1	Demonstrate advanced expertise in engaging in sustained, in-depth creative and critical practice (Experimentation)
LO2	Exhibit advanced expertise in the synthesis of ideas from research materials in the realisation of project work (Research)
LO3	Plan and realise a complex and advanced self-directed project (Personal and Professional Development)
LO4	Identify and communicate to key audiences for applied ethics in technology development (Communication and Presentation)

Unit Assessment Summary
Element – The assessment for this unit is weighted. In element-based assessment, you must achieve at least an E grade in each element, and an aggregate grade of at least D- in the overall unit. Failure (F, or F-), or non-submission in any element defaults to Fail for the unit. Assessment will be against the specified marking criteria.

Elemental	
Assessment Type	Portfolio
% of total	50
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief
Feedback	Refer to Assignment Brief
Assessment Description	**Element 1: Portfolio of work documenting the research and development process and outcomes of the set project work**

Elemental	
Assessment Type	Thesis
% of total	50
Hand-in Week	Refer to Assignment Brief
Briefing	Refer to Assignment Brief

Feedback	Refer to Assignment Brief
Assessment Description	Element 2: Thesis of not less than 7,500 words.

Scheduled Learning and Teaching
Details of the total scheduled learning and teaching activity for each unit, can be found on your student portal on SITS, the UAL student records system. Click on the "scheduled learning and teaching" tab at the top of the home screen when you have logged in using your UAL details.

Reading List	**Essential Reading** Becker, L. (2014) *Presenting Your Research: Conferences, Symposiums, Poster Presentations and Beyond*. SAGE. Jaggar, A. (ed) (2014) *Just Methods: An Interdisciplinary Feminist Reader*, 2nd edition. Boulder: Paradigm Publishers. Koskinen, I., Zimmerman, J., Binder, T., Redstrom, J., & Wensveen, S. (2011). *Design Research Through Practice: From the Lab, Field, and Showroom*. Morgan Kaufmann. Resnick, E. (2019) *The Social Design Reader*. Bloomsbury. Robson, C. (2011). *Real World Research*. John Wiley & Sons. **Further Reading**

Caroline Ramazanoglu, C. and Holland, J. (2002) *Feminist Methodology: Challenges and Choices.* London: Sage.

MacPhe, J. *Celebrate People's History: The Poster Book of Resistance and Revolution.* NewYork: Feminist Press, 2010.

Plattner, H., Meinel, C. and Leifer, L. (2017) *Design Thinking Research: Making Distinctions: Collaboration versus Cooperation*. Springer.

W3C (2019) *Accessibility Standards Overview*. Available at: https://www.w3.org/WAI/standards-guidelines/ (Accessed 18 February 2020).

Periodicals

Qualitative Inquiry

ACM Digital Library

Web Refs:

The Professional Association for Design http://www.aiga.org

MIT Comparative Media Studies/Writing
https://cmsw.mit.edu/

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