Michael Crabb

mzcrabb@dundee.ac.uk

Professional Appointments

The University of Dundee, Dundee,

Computing Learning & Teaching Lead, School of Science and Engineering Aug 2021 to Present

Lecturer, School of Science and Engineering. 2018 to Present

Robert Gordon University, Aberdeen, Scotland.

Lecturer, School of Computing Science and Digital Media. 2016 to 2018

Teaching Assistant, School of Computing Science and Digital Media. 2015 to 2016

The University of Dundee, Dundee Scotland.

Research Assistant, School of Computing. 2014 to 2015

Research Focus

Immersive Technology Interface Design – Design and evaluation of Augmented Reality interfaces with a focus on surface projection and phone-based AR systems, developing understanding into the use of public green space and its ability to be used as AR cultural museums.

Accessibility of Digital Media Artefacts – Design of alternative presentation methods for common digital media accessibility features. Focus on subtitle/caption systems and methods that can be used to generate alternative access formats

Games Accessibility and Testing – Use of physical games to understand and evaluate accessibility challenges that can be translated into digital systems.

Research Awards (International)

Best Paper Honourable Mention (2019). For "Developing Accessible Services: Understanding Current Knowledge and Areas for Future Support" at the *ACM SIGCHI Conference on Human Factors in Computing Systems (CHI' 19)*. [This designation is given to the top 5% of peer-reviewed submissions to CHI'19.]

First Place, Student Research Competition (2013). For "Human Cognitive Measurement as a Metric within Usability Studies" at the *ACM SIGCHI Conference on Human Factors in Computing Systems (CHI' 13)*

Teaching Awards (University)

Best Advisor or Personal Tutor (2021). University of Dundee. Dundee University Students Association. Student Lead Teaching Awards 2020-21.

Staff Member of the Year (2021). University of Dundee School of Science and Engineering, Learning and Teaching Awards.

Combined, the 2021 SSEN L&T awards is a Grand Slam with wins in all eligible award categories. This is the only time this has been achieved in SSEN L&T Award history.

Best Assessment and Feedback (2021). University of Dundee School of Science and Engineering, Learning and Teaching Awards.

Innovation in Teaching Award (2021). University of Dundee School of Science and Engineering, Learning and Teaching Awards.

Most Supportive Advisor of Studies (2021). University of Dundee School of Science and Engineering, Learning and Teaching Awards.

Best Module Introductory Video (2021). University of Dundee School of Science and Engineering, Learning and Teaching Awards.

Staff Member of the Year (2020). University of Dundee, School of Science and Engineering, Learning and Teaching Awards.

Best Assessment and Feedback (2020). University of Dundee School of Science and Engineering, Learning and Teaching Awards.

Education and Qualification History

The University of Dundee, School of Computing, Dundee, Scotland.

Doctor of Philosophy (Ph D.) in Computing (2014).

Batchelor of Science (Honours), in Applied Computing (2010).

West College Scotland

Certificate in Lean Organisational Management Techniques, TQUK, L2. (2021).

Edinburgh Business School – Heriot Watt University

Leadership Theory and Practice, Online Course (Ongoing).

Certified Associate in Project Management of the Project Management Institute (2019 to Present)

Certified Scrum Master of the Scrum Alliance (2020 to Present)

Professional Memberships and Invited Positions

Fellow of the Higher Education Academy (2018 to Present)

Fellow of the Royal Society of the Arts 2020 to Present)

Professional Member of the Association for Computing Machinery (2012 to Present)

AWS Campus Expert (Scotland). Amazon Web Services (2019 to Present)

GitHub Campus Advisor (Scotland). GitHub Education (2018 to Present)

External Research Funding

- Michael Crabb (PI), Linda Steedman (Co-I). XR Training Guidelines for Future Application Development. 2021. Scottish Funding Council, Interface, Innovation Voucher Scheme. £4,972.
- Michael Crabb (PI), Serge Sange (Co-I). Technology Enhanced Education for Older Adults. 2020. Scottish Funding Council, Interface, Innovation Voucher Scheme. £5,000.
- Michael Crabb (PI), Alexia Barrable (Co-I), Carol Arnott (Co-I). Growth Mindset Yeti A Framework for Application Direction. 2020. Scottish Funding Council, Interface, Innovation Voucher Scheme. £5,000.
- Michael Crabb (PI), Miguel Nacenta (Co-I). HCI Camp, Research Methods Summer School. Funding from SFC SICSA, Overleaf, and Ticket Sales. £17,754.
- Michael Crabb (PI), Sally Shaw (Co-I). Gamification Methods to Create Communication Friendly Meetings. 2019. Scottish Funding Council, Interface, Innovation Voucher Scheme. £4,906.
- Marcus Robertson-Jones (PI), Michael Crabb (Co-I) Gaming for Individuals with Severe Visual Impairment. 2018. Carnegie Trust for the Universities of Scotland, Vacation Scholarship. £2,000.
- Michael Crabb (PI). Accessible Reality Augmented Reality Interaction Techniques with Accessibility at its Core. 2018. Carnegie Trust for the Universities of Scotland, Research Incentive Grant. £8,854.
- Michael Crabb (PI), Kirsty Noble (Co-I). A System to Gather Structured Argument Data. 2018. Scottish Funding Council, Interface, Innovation Voucher Scheme. £4,625.
- Michael Crabb (PI), Duncan Hart (Co-I). Legible Data: Smart Glasses Application. 2017. Scottish Funding Council, Interface, Innovation Voucher Scheme. £3,869.
- Zaklina Rycko (PI), Michael Crabb (Co-I). UI Prompts to Keep Older Adults Safe Online. 2017. Carnegie Trust for the Universities of Scotland, Vacation Scholarship. £1,350.
- Cara Henderson (PI), Michael Crabb (Co-I). Recolouring IDEs for Dyslexia. 2017. Carnegie Trust for the Universities of Scotland, Vacation Scholarship. £1,350.
- Graham Stead (PI), Michael Crabb (Co-I). Future Web Trends and Accessibility Guidelines. 2017. Carnegie Trust for the Universities of Scotland, Vacation Scholarship Scheme. £1,350.
- Michael Crabb (PI), Alison Gray (Co-I). Skillfluence: Online Collaboration Tool. 2017. Scottish Funding Council, Interface, Innovation Voucher Scheme. £4,881.
- Michael Crabb (PI), Michael Heron (Co-I). Defining the Future of Game Accessibility. 2016. Scottish Informatics and Computer Science Alliance. £3,800.

- Michael Crabb (PI), Bruce Thomson (Co-I). SpaceIPX: Web Portal. 2016. Scottish Funding Council, Interface, Innovation Voucher Scheme. £4,981.
- Kirsty Noble (PI), Michael Crabb (Co-I). Increasing Board Game Interaction with Projected Content. 2016. Carnegie Trust for the Universities of Scotland, Vacation Scholarship. £1,350.
- John Isaacs (PI), Michael Crabb (Co-I), John Aitken (Co-I). FireSpec: Mobile Application. 2016. Scottish Funding Council, Interface, Innovation Voucher Scheme. £4,861.

Scholarship and Internal Research Funding

Michael Crabb. Training Scholarship (Advanced Certified Scrum Master). 2021. The University of Dundee. £500.

Michael Crabb (PI), Alex Barrable, Daniel Rough, Kevin Frediani. 2021. Innovation and Impact Development Fund (IIDF). 2021. £2,500.

Michael Crabb. Training Scholarship (Certified Scrum Master). 2020. The University of Dundee. £900. Michael Crabb. User Experience Lab Hardware Investment. 2018. The University of Dundee. £17,754.

Peer-Refereed Journal Articles

- [J.5] Amy Wilson, Michael Crabb. W3C Accessibility Guidelines for Mobile Games. *The Computer Games Journal* 7, p.49–61. (May 2018). DOI: https://doi.org/10.1007/s40869-018-0058-7
- [J.4] Michael James Heron, Pauline Helen Belford, Hayley Reid, Michael Crabb. Eighteen Months of Meeple Like Us: An Exploration into the State of Board Game Accessibility. *The Computer Games Journal* 7, p.75-95. (May 2018) DOI: https://doi.org/10.1007/s40869-018-0056-9
- [J.3] Michael James Heron, Pauline Helen Belford, Hayley Reid, Michael Crabb. Meeple Centred Design: A Heuristic Toolkit for Evaluating the Accessibility of Tabletop Games. *The Computer Games Journal 7*, p.97-114. (May 2018) DOI: https://doi.org/10.1007/s40869-018-0057-8
- [J.2] Mike Armstrong, Andy Brown, Michael Crabb, Chris Hughes, Rhianne Jones, James Sandford. Understanding the Diverse Needs of Subtitle Users in a Rapidly Evolving Media Landscape. In *SMPTE Motion Imaging Journal*, vol. 125, no. 9, p.33-41. (Dec. 2016). DOI: https://doi.org/10.5594/JMI.2016.2614919
- [J.1] Michael Crabb and Vicki L. Hanson. 2016. An Analysis of Age, Technology Usage, and Cognitive Characteristics Within Information Retrieval Tasks. ACM Trans. Access. Comput. 8, 3, Article 10 (May 2016), 26 pages. DOI: https://doi.org/10.1145/2856046

Peer-Refereed Papers, published in Conference Proceedings

- [C.10] Benjamin M. Gorman, Michael Crabb, and Mike Armstrong. 2021. Adaptive Subtitles: Preferences and Trade-Offs in Real-Time Media Adaption. In CHI Conference on Human Factors in Computing Systems (CHI '21), May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 11 pages. https://doi.org/10.1145/3411764.3445509 [acceptance rate: 26.3%]
- [C.9] Garreth W. Tigwell and Michael Crabb. 2020. Household Surface Interactions: Understanding User Input Preferences and Perceived Home Experiences. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20). Association for Computing Machinery, New York, NY, USA, 1–14. DOI: https://doi.org/10.1145/3313831.3376856 [acceptance rate: 24.3%]
- [C.8] Michael Crabb, Michael Heron, Rhianne Jones, Mike Armstrong, Hayley Reid, and Amy Wilson. 2019. Developing Accessible Services: Understanding Current Knowledge and Areas for Future Support. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19). Association for Computing Machinery, New York, NY, USA, Paper 216, 1–12. DOI: https://doi.org/10.1145/3290605.3300446 [acceptance rate: 23.8%]
 Conference Award: Best Paper Honourable Mention (top 5% of submissions), CHI 2019.
- [C.7] Michael Crabb, Daniel Clarke, Husam Alwaer, Michael Heron & Richard Laing (2019) Inclusive Design for Immersive Spaces, The Design Journal, 22, 2105-2118, DOI: <u>10.1080/14606925.2019.1594934</u>

- [C.6] Michael Crabb, Rachel Menzies, Garreth W. Tigwell, Daniel Clarke, Christopher Lim & Cara Henderson (2019) Take a GANDER. Gathering Accessibility Needs by Doing Explorative Research, The Design Journal, 22, 2303-2306, DOI: 10.1080/14606925.2019.1595040
- [C.5] Rachel Menzies, Michael Crabb, Daniel Herron, Karen Petrie, Craig Stewart, and Mark Zarb. 2015. An Analysis of User Engagement in Relation to Computing Workshop Activities. In Proceedings of the 46th ACM Technical Symposium on Computer Science Education (SIGCSE '15). Association for Computing Machinery, New York, NY, USA, 469–474. DOI: https://doi.org/10.1145/2676723.2677272 [acceptance rate: 43.5%]
- [C.4] Andy Brown, Rhia Jones, Mike Crabb, James Sandford, Matthew Brooks, Mike Armstrong, and Caroline Jay. 2015. Dynamic Subtitles: The User Experience. In Proceedings of the ACM International Conference on Interactive Experiences for TV and Online Video (TVX '15). Association for Computing Machinery, New York, NY, USA, 103–112. DOI: https://doi.org/10.1145/2745197.2745204 [acceptance rate: 24%]
- [C.3] Michael Crabb, Rhianne Jones, Mike Armstrong, and Chris J. Hughes. 2015. Online News Videos: The UX of Subtitle Position. In Proceedings of the 17th International ACM SIGACCESS Conference on Computers & Accessibility (ASSETS '15). Association for Computing Machinery, New York, NY, USA, 215–222. DOI: https://doi.org/10.1145/2700648.2809866 [acceptance rate: 23%]
- [C.2] Chris J. Hughes, Mike Armstrong, Rhianne Jones, and Michael Crabb. 2015. Responsive design for personalised subtitles. In Proceedings of the 12th Web for All Conference (W4A '15). Association for Computing Machinery, New York, NY, USA, Article 8, 1–4. DOI: https://doi.org/10.1145/2745555.2746650 [acceptance rate: 35%]
- [C.1] Michael Crabb and Vicki L. Hanson. 2014. Age, technology usage, and cognitive characteristics in relation to perceived disorientation and reported website ease of use. In Proceedings of the 16th international ACM SIGACCESS conference on Computers & Computers & Computers & Computing Machinery, New York, NY, USA, 193–200. DOI: https://doi.org/10.1145/2661334.2661356 [acceptance rate: 26%]

White Papers

- [WP.5] Andy Brown, Michael Crabb, James Sandford, Matthew Brooks, Michael Armstrong, Caroline Jay (University of Manchester). Dynamic Subtitles: The User Experience. BBC White Paper WHP 305. 2016.
- [WP.4] Michael Crabb, Michael Armstrong. The development of a Framework for Understanding the UX of Subtitles. BBC White Paper 316. 2016.
- [WP.3] Michael Crabb, Michael Armstrong, Chris Hughes. Online News Videos: The UX of Subtitle Position. BBC White Paper 317. 2016.
- [WP.2] Michael Crabb, Michael Armstrong, Chris Hughes. Responsive Design for Personalised Subtitles. BBC White Paper 295. 2015.
- [WP.1] Michael Armstrong, Andy Brown, Michael Crabb, Chris Hughes, James Sandford. Understanding the Diverse Needs of Subtitle Users in a Rapidly Evolving Media Landscape. BBC White Paper WHP 307. 2015.

Thesis

[T.1] Michael Crabb. An Exploration into the Use of Cognitive Characteristics when Designing for Older Adults. Doctoral Thesis, School of Computing, University of Dundee.

Other Publications or Posters

- [O.8] Amy Gourlay, Michael Crabb. 2021. Graphic Novel Subtitles: Requirement Elicitation and System Implementation. In Proceedings of the 2021 ACM Conference on Interactive Media Experiences (IMX'21). Association for Computing Machinery, New York. DOI: https://doi.org/10.1145/3452918.3465489
- [O.7] Michael Crabb, Rhianne Jones, and Mike Armstrong. 2015. The Development of a Framework for Understanding the UX of Subtitles. In Proceedings of the 17th International ACM SIGACCESS

- Conference on Computers & Accessibility (ASSETS '15). Association for Computing Machinery, New York, NY, USA, 347–348. DOI: https://doi.org/10.1145/2700648.2811372
- [O.6] Michael Crabb. 2013. Human cognitive measurement as a metric within usability studies. In CHI '13 Extended Abstracts on Human Factors in Computing Systems (CHI EA '13). Association for Computing Machinery, New York, NY, USA, 2677–2682. DOI: https://doi.org/10.1145/2468356.2479492
 - Conference Award: Student Research Competition, First Place. CHI 2013.
- [O.5] Michael Crabb. 2012. Cognitive Usability: Understanding Older Adults Search Habits. Doctoral Consortium at The British Computing Society: Human Computer Interaction Conference 2012.
- [O.4] Michael Crabb, Vicki Hanson, Andy Cobley. Understanding Older Adults Search Habits. SICSA PhD Conference. 2012.
- [O.3] Michael Crabb, Vicki Hanson, Andy Cobley. 2012. Cognitive Usability: Using Human Factors to Influence Future Online Usability Requirements. EPSRC Digital Economy Conference. 2012.
- [O.2] Michael Crabb, Vicki Hanson, Andy Cobley. 2012. Aiding Data Gathering in Web Usability Studies. EPSRC Digital Economy Conference, 2012.
- [O.1] Michael Crabb, Vicki Hanson, Andy Cobley. 2012. Understanding Older Adults Search Habits. EPSRC Digital Economy Conference, 2011.

Service to the Profession: Leadership Roles (ongoing activities listed first)

- **Committee Member,** ACM Special Interest Group in Computer Human Interaction, Accessibility Committee. 2021 Present.
- **Co-Theme Lead**, Scottish Informatics and Computer Science Alliance (SICSA) HCI Research Theme. Application and appointed role. October 2020 Present.
- **Sub-Group Lead,** World Wide Web Consortium, Web Content Accessibility Guidelines, XR: Mixed Reality. Appointed Role. 2019 Present.
- **Associate Chair (AC),** paper/notes subcommittee on Accessibility and Aging, The 2022 ACM CHI Conference on Human Factors in Computing Systems (CHI '22), New Orleans, LA.
- Academic Chair, The 2021 Scottish Informatics and Computer Science Alliance Conference, Dundee.
- **Accessibility Chair,** The 2021 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR '21), Taichung, Taiwan.
- **Doctoral Consortium Mentor,** The 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2021), Online.
- Event Organiser, The Scottish Informatics and Computer Science Alliance 2021 PreCHI Day, Online. 2021.
- Event Organiser, Socially Distant Research Methods Workshop, Online 2021. Sponsored by SICSA. 2021.
- Associate Chair (AC), The 2021 ACM IMX Conference on Interactive Media Experiences (IMX '21), Online.
- Accessibility Chair, The 2021 ACM IMX Conference on Interactive Media Experiences (IMX '21), Online.
- **Associate Chair (AC),** paper/notes subcommittee on Accessibility and Aging, The 2021 ACM CHI Conference on Human Factors in Computing Systems (CHI '21), Tokyo, Japan.
- **Associate Chair (AC),** paper/notes subcommittee on Accessibility and Aging, The 2020 ACM CHI Conference on Human Factors in Computing Systems (CHI '20), Honolulu, Hawaii.
- **Event Organiser,** The Scottish Informatics and Computer Science Alliance 2020 HCI All Hands Meeting, Dundee, Scotland. 2020.
- **Associate Chair (AC),** The 2020 ACM IMX Conference on Interactive Media Experiences (IMX '20), Barcelona, Spain.
- Poster Chair, The Scottish Informatics and Computer Science Alliance PhD Conference 2019.
- **General Chair and Lead Organiser**, Human Computer Interaction Research Methods Summer School (HCI Camp 2019).
 - I was responsible for all organisation aspects of this weeklong research methods summer school that was attended by 44 PhD students and 9 academic facilitators. Representation from 16 international universities.
- **Doctoral Consortium Chair,** The Scottish Informatics and Computer Science Alliance Human Computer Interaction Theme Event 2019. Aberdeen, Scotland.

Event Organiser, The Scottish Informatics and Computer Science Alliance 2019 PreCHI Day, Dundee. 2019.

Academic Chair, The Scottish Informatics and Computer Science Alliance PhD Conference 2018.

Co-Theme Lead, Scottish Informatics and Computer Science Alliance (SICSA) Future of Game Accessibility Knowledge Exchange Theme. 2016 – 2017.

Event Organiser, The Scottish Informatics and Computer Science Alliance 2014 HCI All Hands Meeting, Dundee, Scotland. 2014.

Doctoral Consortium Mentor, The 2011 British Computer Society Human Computer Interaction Conference (BCS-HCI'11). Newcastle, UK.

Website Chair, UKRI EPSRC Digital Economy Conference, 2011. Newcastle, UK.

Service to the Profession: Senior Program Committee Roles

Awards / Best Paper Committee, The 2021 ACM CHI Conference on Human Factors in Computing Systems (CHI '21), Tokyo, Japan.

Best Paper Committee, The 2020 ACM ASSETS Conference on Human Factors in Computing Systems (ASSETS '20), Athens, Greece.

Best Poster/Demo Committee, The 2015 ACM IUI 2015 Conference on Intelligent User Interfaces (IUI-2015), Atlanta

Service to the Profession: Program Committee Roles

Program Committee Member, The 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2021), Online.

Program Committee Member, User Experience and Accessibility Track, The Web Conference 2021 (WebConf '21), Ljublijana, Solvenia.

Program Committee Member, The 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2020), Athens, Greece.

Program Committee Member, The 21st International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2019), Pittsburgh, PA, USA.

Program Committee Member, The 20th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2018), Galway, Ireland.

Program Committee Member, The 18th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2016), Reno, Nevada, USA.

Service to the Profession: Journal Reviewing

Reviewer, ACM Transactions on. Accessibility, Association for Computing Machinery – Special Interest Group on Accessibility (2015 to Present).

Reviewer, Universal Access in the Information Society, Springer. (2017 to Present)

Reviewer, Behaviour & Information Technology, Taylor & Francis. (2017 to Present)

Reviewer, The Computer Games Journal., Springer. (2018 to Present)

Service to the Profession: Conference Reviewing

Reviewer, The 13th ACM Conference on Creativity and Cognition (C&C-2021), Online.

Reviewer, The 2021 ACM Symposium on Computer-Human Interaction in Play (CHI-Play '21), Online.

Reviewer, The 2021 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR'21), Online.

Reviewer, The 2021 ACM IMX Conference on Interactive Media Experiences (IMX '21), Online.

Reviewer, The 36th ACM CHI Conference on Human Factors in Computing Systems (CHI-2021), Toyko. Special recognition award for outstanding review (x2), CHI 2021 Papers.

Reviewer, The 2021 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR), Lisbon, Portugal.

Reviewer, The 35th ACM CHI Conference on Human Factors in Computing Systems (CHI-2020), Honolulu.

Reviewer, The 2020 ACM CHI Play Conference on Playful Computer Human Interaction Special recognition award for outstanding review, CHI PLAY 2020 Papers.

Reviewer, The 2020 ACM Conference on Designing Interactive Systems (DIS '20), Eindhoven, Netherlands.

Reviewer, The 2020 ACM IMX Conference on Interactive Media Experiences (IMX '20), Barcelona, Spain.

Reviewer, The 34th ACM CHI Conference on Human Factors in Computing Systems (CHI-2019), Glasgow. Special recognition award for outstanding review (x2), CHI 2019 Papers.

Reviewer, The 2019 ACM Interaction Design and Children Conference (IDC-2019), Boise, Idaho.

Reviewer, The 33th ACM CHI Conference on Human Factors in Computing Systems (CHI-2018), Toronto.

Reviewer, The 2018 ACM Conference on Designing Interactive Systems (DIS 2018), Hon Kong, China.

Reviewer, The 32nd ACM CHI Conference on Human Factors in Computing Systems (CHI-2017), Colorado.

Reviewer, The 9th ACM Conference on Creativity & Cognition (C&C 2017), Singapore.

Reviewer, The 2017 ACM Conference on Designing Interactive Systems (DIS 2017), Edinburgh, UK.

Reviewer, The 2017 ACM Conference on Interactive Experiences for Television (TVX-2017), Netherlands.

Reviewer, The 31st ACM CHI Conference on Human Factors in Computing Systems (CHI-2016), California.

Reviewer, The 19th ACM Conference on Computer Supported Cooperative Work (CSCW 2016), San Francisco.

Reviewer, The 2016 ACM Interaction Design and Children Conference (IDC-2016), Manchester, UK.

Reviewer, The 21st ACM Conference on Intelligent User Interfaces (IUI-2016), California.

Reviewer, The 2016 ACM Conference on Interactive Experiences for Television (TVX-2016), Chicago.

Reviewer, The 30th ACM CHI Conference on Human Factors in Computing Systems (CHI-2015), Seoul.

Reviewer, The 2015 ACM Interaction Design and Children Conference (IDC-2015), Massachusetts.

Reviewer, The 20th ACM Conference on Intelligent User Interfaces (IUI-2015), Atlanta.

Reviewer, The 2015 ACM Conference on Interactive Experiences for Television (TVX-2015), Brussels.

Reviewer, The 29th ACM CHI Conference on Human Factors in Computing Systems (CHI-2014), Paris.

Reviewer, The 17th ACM Conference on Computer Supported Cooperative Work (CSCW 2014), Baltimore.

Service Activities within University

Research Cluster Lead of Human Centred Computing in School of Science and Engineering. 2019 to Present.

Committee Member of the School of Science and Engineering Ethics Committee. 2018 to Present.

Committee Member of the School of Science and Engineering Academic Board. 2018 to Present.

Committee Member of the Discipline of Computing Industrial Advisory Board 2018 to Present.

Working Group Lead of the Short Life Working Group in VR for Education, School of Science and Engineering, 2018 to 2019.

Invited Presentations and Guest Lectures

[&]quot;Developing Accessible Services". 2019. Conference Presentation at 35th ACM CHI Conference on Human Factors in Computing Systems (CHI-2019), Glasgow.

[&]quot;UX with Hard-to-Reach People in Easy-to-Reach Places". 2019. Invited speaker at UX Scotland, Edinburgh.

[&]quot;Accessible Everyone". 2018. Invited speaker at UX Scotland, Edinburgh.

[&]quot;Accessible Everyone". 2018. Invited speaker at Accessibility Scotland, Edinburgh.

[&]quot;Accessible and Assistive Interfaces". 2018. Invited speaker at the Scottish Informatics and Computer Science Alliance 2018 HCI All Hands Meeting.

[&]quot;Teaching the Cloud Programmers of Tomorrow". 2016. Invited speaker at ScotCloud 2016 Conference.

[&]quot;Dynamic Subtitles - The User Experience". 2015. Conference Presentation at the 2015 ACM Conference on Interactive Media Experiences (IMX'15).

[&]quot;Online News Videos - The UX of Subtitle Position". 2015. Conference Presentation at the 17th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2017).

[&]quot;Human Cognitive Measurement as a Metric within Usability Studies". 2013. Conference Presentation the 29th ACM CHI Conference on Human Factors in Computing Systems (CHI-2014), Paris.

[&]quot;Aiding Data Gathering in Web Usability Studies". 2012. Conference Presentation at the 2012 EPSRC Digital Economy Conference.

"Using Human Factors to Influence Future Online Usability Requirements". 2012. Conference Presentation at the 2012 EPSRC Digital Economy Conference.

Teaching Experience and Curriculum Design

- WWW Authoring. AC11002. 2018 Present. School of Science and Engineering, University of Dundee. Students are taught introductory aspects to web design and development. A focus is placed on understanding HTML, CSS, JavaScript, and various libraries/frameworks that are core to modern web development. Students are set a number of group coursework elements throughout the course to evaluate their understanding and to assess their ability of implementing web applications.
- **Agile Software Engineering.** AC31007 & AC51004. 2019 Present. School of Science and Engineering, University of Dundee. Development of agile software development skills with attention focused on lean, scrum, and extreme programming. Students take part in an intensive teaching block that is followed by a two-week group coursework with an industrial client where they are expected to develop a prototype system and follow scrum best-practice throughout.
- **Physical Computing**. AC22006. 2018-2019. School of Science and Engineering, University of Dundee. Students develop an understanding of physical/digital systems with a focus on the Arduino software platform. Students are given the opportunity to learn about smart homes, smart-city infrastructure, and the legal and ethical issues related to deploying computer systems in our homes.
- **Research Frontiers**. AC42001. 2018-2019. School of Science and Engineering, University of Dundee. Students are introduced to cutting edge research in Mixed Reality and Accessibility and are given the opportunity to develop a prototype XR system using traditional paper prototyping methods.

Advanced Multimedia Component Design. CM4112. 2017. School of Computing. Robert Gordon University.

Enterprise Web Systems. CM4025. 2017. School of Computing. Robert Gordon University.

Perception and Visualisation. CM3009. 2016. School of Computing. Robert Gordon University.

Computing Information Systems. CM1016. 2016 – 2017. School of Computing. Robert Gordon University.

Software Architecture and Engineering. CM2027. 2016. School of Computing. Robert Gordon University.

Programming Mobile Devices. CM3019. 2016. School of Computing. Robert Gordon University.

User Centred Design. CM3026. 2016. School of Computing. Robert Gordon University.

Web Application Development. CM3028. 2015 – 2016. School of Computing. Robert Gordon University.

Enterprise Web Systems. CM4025. 2016. School of Computing. Robert Gordon University.

Web System Development, CMM503. 2015 – 2016. School of Computing. Robert Gordon University.

Internet Based Programming, CM3006. 2015. School of Computing. Robert Gordon University.

Research Staff Supervision

Dr Garreth Tigwell, Research Assistant. School of Science and Engineering, University of Dundee. 2019.

Ph.D. Student Advisees

Anthony Sweeney. Ph.D. primary advisor, School of Science and Engineering, University of Dundee. October 2020 to Present

Lee Cheatley. Ph.D. secondary advisor, Duncan of Jordanstone College of Art and Design, University of Dundee. April 2020 to Present.

Labake Odushegun, Ph.D. primary advisor, School of Science and Engineering, University of Dundee. May 2019 to Present.

Rob Ryder-Richardson. Ph.D. primary advisor, School of Science and Engineering, University of Dundee. January 2019 to Present

Ph.D Thesis and Exam Committees

Rory Duthie, Thesis Committee Convenor, University of Dundee. 2020.

Charalampos Kyfonidis, Thesis Committee External Examiner, Strathclyde University. 2020.

Dominic De Franco, Transfer of Ordinance Committee, University of Dundee. 2020

Ladan Safiee, Transfer of Ordinance Committee, University of Dundee. 2019.

Research Internship Advisees

Gina Fenton, University of Dundee Innovation and Impact Development Fund Internship, Maximising Adventure Chances for Historic Augmented Interaction Routes. 2021.

Marcus Robertson-Jones, Carnegie Vacation Scholarship. Carnegie Trust for the Universities of Scotland. Gaming for Individuals with Severe Visual Impairment. 2018.

Zaklina Rycko, Carnegie Vacation Scholarship. Carnegie Trust for the Universities of Scotland. UI Prompts to Keep Older Adults Safe Online. 2017.

Cara Henderson, Carnegie Vacation Scholarship. Carnegie Trust for the Universities of Scotland. Recolouring IDEs for Dyslexia. 2017.

Graham Stead, Carnegie Vacation Scholarship. Carnegie Trust for the Universities of Scotland. Future Web Trends and Accessibility Guidelines. 2017.

Kirsty Noble, Carnegie Vacation Scholarship. Carnegie Trust for the Universities of Scotland. Increasing Board Game Interaction with Projected Content. 2016.

Completed Training and Development Programmes

Coaching Skills at Work - Getting the Best from Others, Hutchinson Training & Development. 2021.

Research Team Leadership in Changing Times, AdvanceHE. 2021.ß

Developing Your Research Strategy, My Consultants. 2020.

Principles for Establishing Effective New Research Teams, My Consultants. 2020.

Leading Academic Teams, My Consultants. 2020.

Managing Your Manager, Hutchinson Training & Development. 2020.

Effective Management, Simon Haslam Training. 2019.

Administration of Research – From Application to Final Expenditure, University of Dundee. 2019.

Certified Associate in Project Management, Fistral Training and Consultancy. 2019

Writing Research Grant Applications, Parker Derrington Training and Consultancy. 2018.