Alexander Hambley

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OVERVIEW

• Profile: I am a researcher working at the boundary of HCI and AI. Thus far, my research has focused on the design, development, and evaluation of accessibility technologies for visually impaired users. I am seeking postdoctoral opportunities at the intersection of HCI and AI. My first-class degree in Computer Science has enabled me to develop excellent analytical skills, the ability to think logically and to work under pressure.

• Research Interests: Human-Computer Interaction, Web Accessibility, AI, Machine Learning, Unsupervised Learning.

EDUCATION

The University of Manchester

Manchester, UK

PhD in Computer Science

January 2020 - Present

Thesis title: Empirical web accessibility evaluation for blind web users. Advised by: Prof. Simon Harper, Dr. Yeliz Yesilada, Dr. Markel Vigo.

The University of Nottingham

Nottingham, UK

BSc (Hons) in Computer Science; First Class (76%)

September 2016 - July 2019

First-class modules include: Fundamentals of AI (73%); Software Maintenance (77%); Distributed Systems (71%); Human-Computer Interaction (70%); Software Specification (81%); Software Engineering Group Project (Leader) (90%); Collaboration and Communication Technologies (79%); Mobile Device Programming (78%); Professional Ethics in Computing (78%); Computer Security (73%); Fundamentals of Information Visualisation (81%).

Dissertation: A study of the addictive nature of smartphones and social media (84%).

EXPERIENCE

The University of Manchester

Manchester, UK

January 2020 - Present

- o User Experience: Marked and moderated coursework for over 150 students. Provided formative and summative feedback.
- o Database Systems: Ran laboratory sessions for 30 students at a time. Assessed and moderated coursework for over 50 students. Presented formative and summative feedback.
- o Introduction to Programming II: Coordinated focused laboratory sessions. Marked and moderated coursework. Assigned formative and summative feedback. Facilitated group work.
- o First Year Group Project: Advised student projects. Provided formative feedback. Facilitated group work.

HeX Productions

Graduate Instructor

Nottingham, UK

Software Developer (Accessibility)

May 2019 - September 2019

- o Impact: Established a successful new technology event in Nottingham. Created a new accessible website for the event. Modified and repaired several existing public sector websites for conformity with WCAG 2.1 AA.
- o Created an accessible e-Learning website and presented to over 30 developers and industry experts talks on accessible web development.
- o Skills: Developed websites using technologies such as WordPress, Terminalfour, PHP, JavaScript, and CSS. Worked as a full-stack developer with accessibility in mind, developing a practical understanding of WCAG, presenting, public speaking and organising skills.

The University of Nottingham

Nottingham, UK

IT Support Tutor

August 2018 - December 2018

 Impact: Advised over 100 students with registration difficulties, timetable problems and student ID concerns.

o Skills: Advanced independent and collaborative working skills. Problem solving. Interpersonal skills.

The University of Twente (UT)

Research Software Developer (Intern)

Enschede, Netherlands June 2018 - August 2018

- Impact: Developed prototype social robots at the UT DesignLab to assist children with ASD. Robots would vary facial movements to mimic human faces.
- **Skills**: Demonstrated ability to think critically and to communicate effectively with a diverse group of people. Displayed ability to create rapid, effective, low and high fidelity prototypes.

AWARDS

- Best communication paper, W4A 2022 (April, 2022)
- Departmental Doctoral Studentship (University of Manchester) (January, 2020 Present)

PROFESSIONAL SKILLS

Languages: Python, PHP, C, C#, Java, JavaScript, Swift, SQL, R, MATLAB

Frameworks: Scikit, Numpy, TensorFlow, Flask, BeautifulSoup, Scrapy, React, LAMP
Tools: Docker, GIT, MySQL, SQLite, PHPMyAdmin, Android Studio, XCode

• Soft Skills: Research, Software Engineering, Project Management, Writing, Public Speaking, Time

Management, Scientific Communication, Leadership, Collaboration

ENGAGEMENT

ClickSilver (Capital One)

Nottingham, UK

Mentor August 2018 - December 2018

- o Task: Mentored an older person with memory difficulties in the use of computers.
- o **Outcome**: Developed unique ways of teaching complex ideas to someone with memory problems.

Professional Activities

Organisational Roles

Publicity Chair

September 2021 - April 2022

W4A 2022: Refined mailing lists, disseminated calls for papers and ran conference social media channels.
Compiled and uploaded video recordings of the conference proceedings. Liaised with authors, organising and steering committee.

Peer-Reviewing

Journals

- o ACM Transactions on the Web (TWEB): 2 Reviews in 2022
- ACM Transactions on Accessible Computing (TACCESS): 2021

FIRST-AUTHOR RESEARCH PUBLICATIONS

- Optimising the website accessibility conformance evaluation methodology. Alexander Hambley, Yeliz Yesilada, Markel Vigo, Simon Harper. W4A 2022 (April, 2022).
 Best Communications Paper Winner.
- Empirical web accessibility evaluation for blind web users. Alexander Hambley, Yeliz Yesilada, Markel Vigo, Simon Harper. ACM SIGACCESS Accessibility and Computing (*January, 2021*)