

BENJAMIN GORMAN, B.Sc., Ph.D.

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Computer Science academic and software engineering educator with 10+ years' experience designing and delivering technical curriculum, supporting faculty development, and leading industry-facing engagement. Strong background in full-stack development, accessibility, and mobile computing, with extensive experience running training, hackathons, and international partnerships.

SKILL SUMMARY

- **Technical Proficiency:** Strong programming skills in Java, Python, JavaScript, C#, SQL, React, React-Native, Android, Arduino, and Processing, with practical experience in electronics, soldering, and circuit design
- **Curriculum Development & Teaching:** Expertise in designing and delivering undergraduate and postgraduate courses both in-person and remotely; Certified Raspberry Pi educator.
- **Stakeholder & External Engagement:** Extensive experience in organising and leading stakeholder-facing activities, 15+ large-scale student/industry hackathons, industry mixer events and international partnership visits (e.g., three to China for TNE and partnership development)
- **Leadership & Management:** Experience leading academic teams, developing strategy, and enhancing student experience
- **Training & Faculty Support:** Experience supporting academic staff adoption of new tools and practices through workshops, mentoring, and resource development.

EMPLOYMENT & LEADERSHIP EXPERIENCE

Bournemouth University

2018 - Present

Bournemouth University, Bournemouth, Dorset, U.K.

Principal Academic in Computer Science

September 2025 - Present

Deputy Head of Department, Computing and Informatics

October 2024 – September 2025

Senior Lecturer in Computer Science

September 2022 – October 2024

Lecturer in Computer Science

November 2018 – September 2022

Teaching & Curriculum Development

- Teaching focus: full-stack software engineering, mobile app development, accessibility, and user-centred computing, (Python, JavaScript, React, React Native, databases, Arduino, and HCI).
- Designed and delivered multiple UG/PG units, such as Software Engineering, User Centred Web Development, Ubiquitous & Mobile Computing, and Accessibility & Assistive Technologies.
- Supervised undergraduate and postgraduate projects, embedding contemporary development practices and industry-aligned tooling.

Leadership & Departmental Roles

- As Deputy Head of Department, I was responsible for academic planning, curriculum oversight, line management and staff development.
- Chair of the Teaching Committee, leading pedagogic strategy and cross-departmental enhancement.
- Programme Leader for MSc Digital Health and MSc Internet of Things, overseeing curriculum design, academic quality, and stakeholder engagement.
- Led major outreach events including 15+ large-scale hackathons, industry mixer events, and showcase activities involving external partners.

External & International Engagement

- Represented Bournemouth University during transnational education visits (e.g., partnership development in China).
- Extensive experience as an external examiner and validation panel member for multiple universities
- Active collaboration with industry and public-sector partners through events, projects, and student opportunities.

University of Dundee

University of Dundee, Dundee, Scotland, U.K.

Sessional Lecturer / Associate Lecturer / Seminar Tutor

2015 – 2018

Taught across Applied Computing, Computer Science, Interaction Design, and Product Design, including:

- Programming (Java, Python, Processing), data structures, and introductory computer science.
- Physical computing and prototyping using Arduino, sensors, and embedded systems.
- Labs and workshops in UX, HCI, and visual computing.
- Supervision and assessment of undergraduate projects.

Dynamo Games

Dynamo Games, Dundee, Scotland, U.K.

Analytics Developer

2011 – 2012

Working in an award-winning Scottish game development studio, I co-developed a web-based system using SQL and PHP that tracked and analysed Facebook player data that was used to direct future game development.

EXTERNAL EXAMINING & PROGRAMME VALIDATION

Programme Subject Expert (Freelance Contractor)

IU Online University

March 2024 – June 2024

Reviewed and provided subject expertise on curriculum design, learning outcomes, and assessment strategies for online computer science and technology programmes. Advised on the alignment and adaptation of courses from European to North American academic standards, ensuring consistency in content quality, accreditation requirements, and industry relevance.

External Validation Panel Member – BSc (Hons) Software Development, MSc Business Intelligence, MSc Finance and Accounting, MSc Cyber Security, MSc Data Management

The London Institute of Banking & Finance (LIBF)

November 2023

Evaluated and contributed to the validation of multiple programmes, including MSc Business Intelligence, BSc Software Development, MSc Cyber Security, and MSc Data Management. Assessed course structures, accreditation requirements, and industry relevance to ensure academic rigor.

External Examiner – MSc Digital Health Systems

University of Strathclyde, Glasgow, Scotland, U.K.

January 2023 – Present

Responsible for quality assurance and academic standards of the MSc Digital Health Systems programme. Regularly review assessments, exam scripts, and dissertations, providing independent feedback to ensure academic integrity, fairness, and adherence to university policies. Conduct on-site visits to meet with faculty, and students to discuss programme development, assessment standards, and student experience.

GRANTS & FUNDING

“Exploring Subtitle Data for Interactive Experiences in Virtual Production” - XR Network+ Virtual Production R&D Grants Application – 2024: Benjamin M Gorman (PI), Michael Crabb, ITV (Industry Partner) (£10,000)

FlexAble Narratives – Innovate UK ICURe Discover Programme – 2023: Benjamin M Gorman (PI) (£2,500)

“Digital Passport for Accessible Authentication” – Cyber Security Academic Start-up Accelerator Programme (CyberASAP) – Innovate UK – 2020: Huseyin Dogan (PI), Paul Whittington, Benjamin M. Gorman, Nan Jiang, Keith Phalp. (£31,612)

“Accessible Emoji” - BU ACORN (Acceleration of Research & Networking) Fund – 2019: Benjamin M. Gorman, Garreth W. Tigwell, Rachel Menzies, Erin Brady - Internal BU Early Career Researcher funding to support a project to explore the accessibility of emoji across social media. (£4002)

ESPRC Doctoral Training Account: Ph.D. Scholarship awarded by the Engineering and Physical Sciences Research Council (ESPRC), including tuition fees, stipend and travel budget. (£64,000)

ASSETS 2015: Accepted to attend the Doctoral Consortium at Assets 2015. Awarded full travel and accommodation costs for the duration of the conference. (£1250)

British HCI 2015: Accepted to attend the Doctoral Consortium at British HCI 2015. Awarded full travel and accommodation costs for the duration of the conference. (£500)

ASSETS 2014: Accepted to attend the Student Research Competition at Assets 2014. Awarded travel and accommodation costs. (US\$500)

Experimental Methodology in Computational Science Research Summer School, St Andrews University - 2014: Awarded accommodation and workshop costs. (£500)

PEER-REVIEWED PUBLICATIONS (Conference Papers)

1. Carla F. Griggio, **Benjamin M. Gorman**, and Garreth W. Tigwell. 2024. "Party Face Congratulations! Exploring Design Ideas to Help Sighted Users with Emoji Accessibility when Messaging with Screen Reader Users." *Proceedings of the 2024 ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2024)*. Association for Computing Machinery, New York, NY, USA.
 2. Nash Lyke, **Benjamin M. Gorman**, and Garreth W. Tigwell. 2023. "Exploring the Accessibility of Crypto Technologies." *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI 2023)*. Association for Computing Machinery, New York, NY, USA.
 3. **Benjamin M. Gorman**, Michael Crabb, Michael Armstrong, 2021. "Adaptive Subtitles: Preferences and Trade-Offs in Real-Time Media Adaption". *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. Association for Computing Machinery, New York, NY, USA,
 4. Garreth W Tigwell, **Benjamin M. Gorman**, and Rachel Menzies, 2020. "Emoji Accessibility for Visually Impaired People". In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. ACM, New York, NY.
 5. **Benjamin M. Gorman** and David R. Flatla, 2018. "MirrorMirror: A Mobile Application to Improve Speechreading Acquisition". In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. ACM, New York, NY.
 6. **Benjamin M. Gorman** and David R. Flatla, 2017. "A Framework for Speechreading Acquisition Tools" In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*. ACM, New York, NY.
 7. **Benjamin M. Gorman**, 2014. "VisAural: a wearable sound-localisation device for people with impaired hearing." In *proceedings of the 16th international ACM SIGACCESS conference on Computers & Accessibility*. ACM, New York, NY.
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WORKSHOP ORGANISATION

1. Dai, Jiamin, **Benjamin M. Gorman**, Garreth W. Tigwell, Helena Lyhme, Belén Barros Pena, Karyn Moffatt, and Celine Latulipe. 2024. "accessFinTech: Designing Accessible Financial Technology." In *Proceedings of the 2024 International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2024)*. ACM, New York, NY.
 2. Gleason, Cole, Patrick Carrington, Lydia B. Chilton, **Benjamin M. Gorman**, Hernisa Kacorri, Andrés Monroy-Hernández, Meredith Ringel Morris, Garreth W. Tigwell, and Shaomei Wu. 2019. "Addressing the Accessibility of Social Media." In *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing (CSCW 2019)*. ACM, New York, NY.
 3. Tigwell, Garreth W., Zhanna Sarsenbayeva, **Benjamin M. Gorman**, David R. Flatla, Jorge Goncalves, Yeliz Yesilada, and Jacob O. Wobbrock, 2019. "Addressing the challenges of situationally-induced impairments and disabilities in mobile interaction." In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019)*. ACM, New York, NY.
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WORKSHOP PAPERS

1. Michael Mauderer, Garreth W. Tigwell, **Benjamin M. Gorman**, David R. Flatla, 2017. "Beyond Accessibility: Lifting Perceptual Limitations for Everyone." *Proceedings of the CHI 2017 Workshop on Amplification and Augmentation of Human Perception*.
2. **Benjamin M. Gorman**, 2016. "Reducing viseme confusion in speechreading" *ACM SIGACCESS Accessibility and Computing*. 114, 36 - 43. ACM, New York, NY.
3. Sylwester Arabas, Michael R. Bareford, Lakshitha R. de Silva, Ian P. Gent, **Benjamin M. Gorman**, Masih Hajjarabderkani, Tristan Henderson, Luke Hutton, Alexander Kononov, Lars Kothhoff, Ciaran McCreesh, Miguel A. Nacenta, Ruma R. Paul, Karen E. J. Petrie, Abdul Razaq, Daniël Reijbergen, and Kenji Takeda, "Case Studies and Challenges in Reproducibility in the Computational Sciences", *First Summer School on Experimental Methodology in Computational Science Research, St Andrews*, August 4-8, 2014.
4. **Benjamin M. Gorman** and David R. Flatla, "VisAural: A Tool for Converting Audible Signals into Visual Cues", *Proceedings of CHI 2014 Workshop on Assistive Augmentation*, Toronto, Canada, 2014

PRESENTATIONS

Conference Paper Presentation “MirrorMirror: A Mobile Application to Improve Speechreading Acquisition” 2018, 20 minutes. *CHI 2018, Montréal, Quebec, Canada.*

Conference Paper Presentation “A Framework for Speechreading Acquisition Tools” 2017, 20 minutes. *CHI 2017, Denver, Colorado. U.S.A.*

Invited Speaker “A Framework for Technology to Improve Speechreading” 2016, 60 minutes. *Speech and Hearing Sciences Department, Queen Margaret University, Edinburgh, Scotland, U.K.*

Doctoral Training Day - Discussion Primer “A Mathematical Description of the Speed/Accuracy Trade-off of Aimed Movement” 2015. 10 minutes. *British HCI 2015, Lincoln, England, U.K.*

Doctoral Consortium “Reducing viseme confusion in speech-reading” 2015, 20 minutes. *ASSETS 2015, Lisbon, Portugal.*

Doctoral Consortium “Improving Speechreading by Visualising Phonemes” 2015, 20 minutes. *SICSA HCI DC 2015, Dundee, Scotland, U.K.*

Student Research Competition “VisAural: a wearable sound-localisation device for people with impaired hearing” 2014, 15 minutes. *ASSETS 2014, Rochester, NY, USA. - Awarded Graduate SRC 1st Place - Gold Medal and \$500 USD.*

Dundee University Computing Department Ph.D. Symposium (2014, 2015, 2016, 2017). 20 minutes. *Dundee, Scotland, U.K.*

EDUCATION

Ph.D., Computer Science (HCI)

University of Dundee

January 2014 – December 2017 (Defended)

Supervised by Dr. David Flatla

Thesis title: *A Framework for Speechreading Acquisition Tools*

My thesis research was focused on developing tools to enhance the acquisition of speechreading (lipreading) for people with hearing loss. To do this, I established a network of Scottish speechreading tutors and students and conducted one-to-one interviews and questionnaires with these stakeholders.

- Gold Medal for ASSETS 2014 Graduate Student Research Competition October 2014
- Alex Carmichael Research Prize for top Ph.D. Research in Computing May 2014, May 2017

B.Sc., Applied Computing (Honours)

University of Dundee

September 2008 – March 2012

First Class Degree

Project title: *Adaptive Advertising*

Supervised by Jonathan Black (NCR) and Professor Vicki Hanson (University of Dundee, RIT)

- NCR Award for Top Level 4 Applied Computing Student June 2012
- NCR Award for Top Level 2 Applied Computing Student June 2010
- NCR Award for Top Level 1 Applied Computing Student June 2009