BENJAMIN GORMAN, B.Sc.
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SKILL SUMMARY

- Three years experience of quantitative and qualitative research methods
- Proficient at running research experiments with users and participants
- Three years of experience supervising student projects
- Knowledge and understanding of object oriented programming
- Prototyping and hardware skills - Arduino, circuit design, soldering
- Quick to learn and acquire new programming languages
- Programming languages and Frameworks
  - Java, C++, C#, C, SQL
  - HTML/CSS, PHP, Javascript, WPF, OpenFrameworks, OpenCV, Android, Arduino, Processing

EDUCATION

University of Dundee — Dundee

Ph.D. Student, School of Computing — 2014 – Present (expected end-date July 2017)

My Ph.D. thesis (supervised by Dr. David Flatla) is titled "Speechreading Acquisition Tools" and focuses on developing novel assistive technology to improve the lives of hearing impaired speech readers.

- Through conducting qualitative interviews and surveys with speechreading tutors and students, I developed a novel speechreading acquisition framework that can be used to design Speechreading Acquisition Tools (SATs) – a new type of technology to improve speechreading acquisition.
- I developed two examples of SATs: 1) PhonemeViz, a visualisation technique that combines Automated Speech Recognition and Augmented Reality to enhance speechreading during conversation. 2) MirrorTrainer, a brain-training inspired Android application that allows speechreaders to record videos of their own and others' lip-shapes to practice speechreading.

University of Dundee B.Sc. — Dundee

Bachelor of Science (Honours) Applied Computing — 2008 – 2012

First Class Degree

Honours Project supervised by industrial partner NCR

- Developed a digital signage system that could serve relevant adverts through detecting the presence of individuals viewing a digital signage display.
- Using 3rd party anonymous video analytics from Intel, real-time viewer details are collected and compared against weighting factors set for each advert. Adverts are then sorted with the most relevant adverts displayed to the current viewers.
- The project was composed of two parts; a desktop application written in C# and WPF, and a web application written in Ruby on Rails.

EMPLOYMENT

Co-lecturer — Dundee

University of Dundee — 2015 – Present

- Creating and delivering lectures on two courses: Data Visualization (Processing & Java) & Physical Computing (Arduino & Java) to a mix of first year Applied Computing and Computer Science students and second year Product Design and Interaction Design students.
- Teaching and supervising in a lab-based setup with practical demonstrations of programming, soldering and circuit design.
- Creating and assessing student assignments from programming to practical work, and presentations.

Teaching Assistant — Dundee

University of Dundee — 2014 – 2015

- Marking of undergraduate assignments on two first year java programming courses: Introduction to Software Development and Introduction to Data Structures and Algorithms.

- Assignments were marked within a weekly turnover period and students were provided with detailed feedback about their work.

Dynamo Games Dundee

Analytics Developer June 2011 – January 2012

- Working in an award winning Scottish game development studio.
- Developed a system that tracked and analysed Facebook player data in order to build strategic further plans for the game development and marketing team.
- Tested games and recorded any errors or bugs found so that the development team could locate and correct them.

AWARDS

Postgraduate

- Gold Medal for ASSETS 2014 Graduate Student Research Competition — October 2014
- Alex Carmichael Research Prize for top PhD Research in Computing — May 2014

Undergraduate

- 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

PEER-REVIEWED PUBLICATIONS

Gorman, Benjamin M., Flatla, David R., "A Framework for Speechreading Acquisition Tools" *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*. ACM 2017.

Gorman, Benjamin M. "Reducing viseme confusion in speech-reading" *ACM SIGACCESS Accessibility and Computing*. 114, 36—43. ACM 2016

Gorman, Benjamin M. "VisAural: a wearable sound-localisation device for people with impaired hearing." *Proceedings of the 16th international ACM SIGACCESS conference on Computers & accessibility*. ACM, 2014.

Gorman, Benjamin M., Flatla, David R., "VisAural: A Tool for Converting Audible Signals into Visual Cues" *Assistive Augmentation 2014, CHI 2014, Toronto, Canada*.

CONFERENCE ACTIVITY & INVITED TALKS

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

Doctoral Consortium "Reducing viseme confusion in speech-reading" *ASSETS 2015, Lisbon, Portugal.*

Student Research Competition "VisAural: a wearable sound-localisation device for people with impaired hearing" *ASSETS 2014, Rochester, NY, USA. –Awarded Graduate SRC 1st Place - Gold Medal*

SUPERVISON EXPERIENCE

M.Sc. Students

- 7 Students (2014 – present)

Undergraduate Students (Honours and Summer Placement Students)

- 15 Students (2014 – present)

Nuffield Research Placement Students (High School students)

- 7 Students (2014 – present)

OTHER EMPLOYMENT

Bruach Bar and Restaurant, Broughty Ferry, Scotland
Bartender — September 2013 – May 2014

Gino's Café, Fremantle, WA, Australia
Bartender — May 2013 – July 2013

Lorne Beach Pavilion, Lorne, VIC, Australia
Bartender — November 2012 – May 2013

Mi Piace, Sydney, NSW, Australia
Bartender — August 2012 – November 2013