GALEN CUTHBERTSON

PERSONAL INFORMATION

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EDUCATION

The Australian National University 2018-Present

Doctor of Philosophy

Artefacts of Interpretation: Machine Learning in the Study of Literature ADVISORS: Assoc. Prof. Katherine Bode & Prof. Tom Gedeon & Dr. Millicent

Weber

(Current)

2017 The University of Adelaide

Masters of Philosophy

An Algorithmic Criticism of Audience Manipulation in Christopher Marlowe's 'The

Massacre at Paris'

Advisors: Assoc. Prof. Lucy Potter & Prof. Mandy Treagus

2015 Radio Adelaide

Certificate III in Media

Training in the production of pre-recorded and live-to-air broadcast radio. Particular focus on technical production skills and use of the mixing desk.

2013 The University of Adelaide

Bachelor of Arts (Advanced) GPA: 6.538/7 · English & Philosophy · Humanities & Social Sciences First successful graduate of the 'Advanced' Arts program, with final year seminars in Anthropology, Politics, History, and Sociology.

EXPERIENCE

Tutor, Australian National University 2018

Australian National University

Ran workshops in 'DESN1001: Making Online' and 'DESN2006: Front-End Web', both of which focused on the use of modern HTML/CSS in web design and emphasised the cultural context of the web.

Data Analyst, Gläshaus 2016-2018

Gläshaus

Assisted in the development of an internal platform for large-scale data mining (and semi-automated assessment) of new-media marketing campaigns. This platform was deployed as a core tool in the firm's quantitative analysis.

Consulted on the development of a number of complex models used to assess customer behaviour for a variety of clients, and assisted in a project exploring the use of Artificial Neural Networks to optimise sales funnels.

2015-2018 Research Assistant, University of Adelaide

University of Adelaide

Contributed substantive research support to projects under Assoc. Prof. Lucy POTTER, including:

- An ongoing project applying late 20th-Century theories of imitation and reception to a study of Christopher Marlowe's *Dido* and its precursors.
- A multi-year project investigating the staging of so-called 'Ekphrastic Catharsis' in Marlowe's Dido and Tamburlaine (Parts 1 & 2). As part of this project, I implemented computational stylistics models to compare the playtexts to the survivng early modern corpus.

 A study of the role of student co-creation in the development of Massive Open Online Courses (see below), and the impact of this process on discussion board moderation during MOOC delivery.

Developed a literature review in support of the *University of Adelaide*'s flagship 'Small Group Discovery Experience' pedagogy:

- Advised key research and pedagogy stakeholders across the university.
 Provided a strategic assessment of the relevant scholarship to the office of the Pro Vice-Chancellor (Student Learning).
- Delivered a comprehensive annotated bibliography over 65,000 words in length within a three week timeframe.
- Delivered targeted reports to project leaders from four faculties.

Participated as a core member of the team responsible for the development of the award-winning *Shakespeare Matters* Massive Open Online Course on the edX platform:

- Identified and recruited industry partners.
- Supervised student co-creators.
- Participated in an intense 'MOOC Retreat', developing a curriculum structure suitable for a diverse international audience.
- Developed the custom 'Which Shakespeare Character Are You?' online quiz used in the course marketing and introductory units.
- Created multiple posts for the public AdelaideX blog.
- The MOOC itself was nominated for the 2018 edX prize, and was listed as one of the 'Top 20 Free Online Courses of All Time' by Class Central.

Provided editing support in the preparation of Volume 2 of Professor Tom Burton and Professor Ken Ruthven's *The Complete Poems of William Barnes*.

2014–2015 GIS Consultant, SA COUNTRY FIRE SERVICE

Assisted in the design, development, and testing of an updated 'map book' for Region 1. This redesign was centered on accessibility and cross-platform support, balancing the needs of 'on-ground' volunteer firefighters and regional command centre personnel.

Developed a framework for the semi-automated update of fire track data, collating raw GPS data taken from on-board truck systems to assess track status and likely driving conditions across the region.

Contributed to a project to streamline the delivery of incident maps to on-ground volunteer firefighters, facilitating greater situational awareness for out-of-region 'strike teams' brought in to assist in large incidents.

2013–2016 Broadcaster, RADIO ADELAIDE

Hosted a weekday drivetime show (The Range) for three years, during which I:

- Trained and managed a group of *University of Adelaide* students to produce six hours of live broadcasting per week;
- Negotiated a strategic redesign of the training curriculum for all student radio programming, and introduced research-driven stress inoculation for student presenters; and,
- Developed a system to scrape all reported playlist data (from over 400 active volunteers) and interface with information collected from the station's playout system (DAD) in order to analyse patterns in volunteer music choices at the station. This analyis then informed future music choice for the flagship *Local Noise* show and the station's music library management.

2012–2013 On Dit Editor, Adelaide University Union

Coordinated, edited, and designed the *University of Adelaide*'s fortnightly 48-page student magazine, *On Dit*. As part of this role, I:

Mentored a volunteer contributor base of over 150 student contributors;

South Australian Country Fire Service

Radio Adelaide

Adelaide University Union

- Increased per-issue print circulation by over 50%, while simultaneously negotiating a 30% budget decrease;
- Increased social media engagement by over 200%, and led the launch of online-exclusive circulation; and,
- Liaised with university and industry contacts across Australia, leading a push for education in investigative reporting practices in student media.

TECHNICAL SKILLS

Code

Fluent use of Python, Julia, R, and SQL. Experience with a variety of text mining, social network analysis, and machine learning frameworks. Particular interest in the use of Keras and TensorFlow for deep network architectures.

Creative

Proficency with the Adobe Creative Suite, and particular expertise in Audition, InDesign, Photoshop, and Illustrator. Experience with web mark-up and programming languages such as HTML, CSS, and RUBY ON RAILS.

Communication

Experience with web publishing platforms such as Wordpress, Squarespace, Drupal, and Mailchimp. Expertise in typesetting and reporting frameworks, including RMarkdown, Jupyter Notebook, and Late. Proficiency with R's ggplot2, lattice, and leaflet visualisation packages, and Python's seaborn, matplotlib, and bokeh.

May 14, 2019