# Henry Burgess

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#### Education |

# Bachelor of Engineering (Software) (Honours Class I)

The University of Queensland (Brisbane, Australia)

January 2017 - June 2021

Thesis title: "Implementation of Online Neuropsychological Tasks using JavaScript" Thesis supervision: Prof. Linda Richards AO, Dr. Ryan Dean, Mr. Richard

Thomas

GPA (4-point scale): 3.81

#### Research Experience

# Washington University in St. Louis (Software Engineer II)

September 2021 - Present

Member of the *Brain Development and Disorders Laboratory* and continuing to enable scientific investigation by developing novel techniques for implementing complex and reliable cognitive tasks online. Primary research interests include the integration of modern web tools with online cognitive tasks and the optimization of software development processes to enable reproducible and reliable data collection.

# Queensland Brain Institute (Research Assistant)

January 2021 - September 2021

Member of the *Brain Development and Disorders Laboratory*, implemented three multi-platform cognitive tasks using JavaScript and modern software development tools. Assisted with task administration and liaised with participants attending the Australian Disorders of the Corpus Callosum (AusDoCC) 2021 conference.

# CSIRO (Research Assistant)

June 2019 - July 2019

Developed a prototype geospatial web application using JavaScript. Required to understand the agricultural context and UX requirements of the end-users from subject-matter experts.

#### Teaching Experience

# The University of Queensland (Casual Academic)

Semester 1, 2022

CSSE3012 (The Software Process)

Introduced students to the software development life-cycle.

Semester 2, 2020

#### COMP4500 (Advanced Algorithms and Data Structures)

Assisted in marking final exams covering advanced computer science concepts such as runtime complexity, computational complexity, and dynamic programming.

Semester 2, 2019 - Semester 2, 2021

#### DECO2800 (Design Computing Studio 2)

Organized and supervised multiple teams of 6 students working on a large-scale collaborative Java software project using GitLab.

Semester 1, 2019 - Semester 1, 2021

#### CSSE1001 (Introduction to Software Engineering)

Introduced students to Python and Object-Oriented Programming concepts.

#### Memberships

# International Research Consortium for the Corpus Callosum and Cerebral Connectivity (IRC<sup>5</sup>)

Associate member, Neuropsychology

# Engineers Australia

 $Graduate\ member$ 

#### Honors and Awards

# UQ Future Leader (Class of 2021)

Nominated and awarded as a 'Class of 2021' Future Leader, recognising students who have gone beyond their typical program of studies to make a positive impact on campus, their community and even the world. Awarded to only 5% of the 10,000 graduates of the University of Queensland each year.

# Hawken Scholar (2020)

Recognizes academic performance in the top 5% of all undergraduate Engineering students at the University of Queensland in 2020.

# Dean's Commendation for Academic Excellence (2019, 2021)

Academic achievement recognised for Semester 1 and 2, 2019, and Semester 1, 2021. Qualification for each award required a semester GPA greater than 6.6 on a 7-point scale.

# **Industry Experience**

# Deswik Mining Consultants – Software Intern (Brisbane, Australia)

January 2020 - February 2020

Worked in the *Deswik.Sched* product development team delivering bug fixes, UI enhancements, and maintenance. Gained experience with tools such as Visual Studio 2019, programming in C#. Worked in an Agile environment, participating in daily stand-up meetings and sprint retrospectives, using Atlassian's Confluence and Jira to manage my workflow.

# Dalian Neusoft University of Information (Dalian, Liaoning province, China)

June 2018 – July 2018

Travelled to Dalian to participate in an innovation and entrepreneurship program facilitated under the Australian Government's New Columbo Plan. Worked in a small team of Chinese and Australian students to deliver a prototype and business plan for an app.

#### Service and outreach

#### CARE STL

I currently volunteer time on my weekends with CARE STL, ensuring cats at the shelter have appropriate food, water, and mental stimulation while I interact with prospective adopters.

#### 180 Degrees Consulting

As a Consultant for 180 Degrees Consulting (The University of Queensland branch), I worked on a project for a non-profit clothing brand benefitting Indigenous Australians. My primary responsibilities related to developing a PR strategy during COVID-19 and optimising operational strategies. I was required to meet regularly with my team to discuss progress and present deliverables to the client.

# **Publications**

#### General Audience

2022

Australian Disorders of the Corpus Callosum (AusDoCC) Newsletter Wrote an article "Online Research and Web Accessibility" submitted and published to the "From our researchers..." column of the May 2022 AusDoCC newsletter.

#### 2021

NeuroDesk running on Azure

Published a tutorial describing how researchers could utilize free computational resources offered by Microsoft Azure to run an instance of the containerized *NeuroDesk* image processing operating system. (https://clumsycode.medium.com/neurodesk-running-on-azure)

#### Peer-reviewed and Preprint

Richards, L. J., Barnby, J., Dean, R., **Burgess, H.**, Kim, J., Teunisse, A., ... & Dayan, P. (2021). Increased persuadability and credulity in people with corpus callosum dysgenesis. medRxiv.

https://doi.org/10.1101/2021.12.28.21268413

# References

# Linda J. Richards AO, FAA, FAHMS, PhD

Chair, Department of Neuroscience and Edison Professor of Neuroscience

Washington University in St. Louis **Email:** linda.richards@wustl.edu

# Ryan Dean, PhD

 $Staff\ Scientist$ 

Washington University in St. Louis **Email:** ryan.dean@wustl.edu

# Joe Barnby, PhD

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