

NICHOLAS LAMBOURNE

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EDUCATION

The University of Queensland

Bachelor of Engineering (Hons) (Software Engineering)
Bachelors of Commerce/Science (Finance & Psychology)

St Lucia QLD, Australia
Feb 2016 - June 2020
Class of 2015

EXPERIENCE

The University of Queensland - Faculty of Engineering, Architecture & IT

Tutor

St Lucia, QLD

Jul 2018 - Present

- Responsible for several teams of first-year engineering students taking the course *Engineering Modelling and Problem Solving* in which they utilise industry tools like CREO and Matlab to design, build and test a model glider.
- In addition to supervising students in practical sessions, I am also responsible for marking student assignments and facilitating various other forms of assessment.

The University of Queensland - Social Robotics Lab

Winter Research Scholar

St Lucia, QLD

Jun 2018 - Jul 2018

- Worked in an interdisciplinary team with linguists and engineers to produce software for the Ngukurr OPIE Social Robot project (see Hermes, below) which was later transferred to the ARC Centre of Excellence for the Dynamics of Language.
- Produced an academic poster with fellow winter scholars for use at conferences demonstrating our work.

ADLED Pty. Ltd. & SS Signs

Technical Advisor

Cleveland, QLD

Oct 2015 - Dec 2017

- Managed technical aspects of a network of LED billboards across South-East Queensland.
- Developed and maintained a real-time online resource monitoring portal for the LED network (see projects, below).
- Compiled financial reports and worked with industry groups to lobby local governments on legislative issues.
- Headed an extensive technical and financial review of CMS systems.
- Developed software to control the rotation of LED billboards to face oncoming traffic (see projects, below).

SKILLS

Programming Languages

Familiar: Python, Java, C, JavaScript, SQL, \LaTeX , HTML/CSS
Encountered: Matlab, Ruby, AVR Assembly, SML, Smalltalk, Prolog

Other Skills

Tools: VCS (Git, SVN), Web Frameworks (Django, Flask, ExpressJS), NodeJS, Jupyter, REST APIs, Linux (Ubuntu), Web Servers (nginx, Apache), SQL DBs (PostgreSQL, MySQL), NoSQL (MongoDB), CI/CD (Jenkins), Wordpress, Cloud Platforms (AWS EC2, S3, EB; Heroku)

PROJECTS

Hermes - The Language Resource Creator (<https://github.com/nicklambourne/elan2resource>)

- As part of the UQ Winter Research Scholarship I developed a cross-platform Python application, using the Qt GUI library, for creating language resources from ELAN linguistic analysis files and associated media.

ndl.im (<https://github.com/nicklambourne/personal>)

- Personal website built using NodeJS, ExpressJS and MongoDB with an automated build pipeline and Jenkins for CI/CD, hosted on Heroku.

uqcsbot (<https://github.com/UQComputingSociety/uqcsbot>)

- Contributed new scripts and script overhauls to the society's Slack bot, originally written in JavaScript and later ported to Python.

adled-io (Proprietary/Closed Source)

- Built a proof-of-concept web portal for monitoring an LED billboard network. Used various APIs to provide real-time status monitoring and live video feeds. Built using Python, Django, PostgreSQL. Hosted on a VPS using Unicorn/nginx.

LED Billboard Rotation System (Proprietary/Closed Source)

- Developed a system for controlling the rotation of a large-format LED billboard. It used a daemonized Python process running on a Unix-based device. Later upgraded to include a GUI element and concurrency-based features.

VOLUNTEERING

Node Girls/Django Girls/Robogals - Brisbane Chapters

2017 - Present

- Provided mentorship in web and robotics technologies in an effort to increase female representation in technology.

University of Queensland Computing Society

2015 - Present

- I have given lightning talks, assisted with events and contributed to open source projects (websites, Slack bots etc.).

YOW! Developer Conference

2017-Present

- Participated as a student volunteer assisting with conference organisation and preparation.

AWARDS

UQ Winter Research Scholarship

The University of Queensland

Dean's Commendation for Academic Achievement

The University of Queensland

UConn Innovation Quest - Finalist

The University of Connecticut

References available on request