Nicholas Lambourne
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Education

The University of Queensland	St Lucia QLD, Australia
Bachelor of Engineering (Hons) (Software Engineering)	Feb 2016 - June 2020
Bachelors of Commerce/Science (Finance & Psychology)	Class of 2015

Experience

The University of Queensland - Complex and Intelligent Systems Group St Lucia, QLD
Research Assistant Jun 2018 - Present
- Part of an interdisciplinary team of linguists and engineers producing software for the Ngukurr OPIE Social Robot Project (see Hermes, below) and for the Transcription Acceleration Project.
- Produced an academic poster and conducted workshop tutorials with end-users demonstrating the produced software.

The University of Queensland - Faculty of Engineering, Architecture & IT St Lucia, QLD
Teaching Assistant 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 including CREO and Matlab to design, build and test a model UAV.
- In addition to supervising students in practical sessions, I am also responsible for marking student assignments and facilitating various other forms of assessment.

ADLED Pty. Ltd. & SS Signs Cleveland, QLD
Technical Advisor 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 digital advertising content management 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/CoEDL/hermes)
- 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 my university computing 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 Gunicorn/nginx.

LED Billboard Rotation System (Proprietary/Closed Source)
- Developed a system for controlling the rotation of large-format LED billboards. It utilised 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