Lewis Smith

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Education

University of Queensland Brisbane, Qld
Bachelor Engineering (Hons) Software Engineering - Nov, 2017

Work Experience

Maxwell Plus Brisbane, Qld
Machine Learning Engineer January 2018 | Present

- Implemented and deployed a Lung Nodule detector for processing Lung CT images using 3D Deep Conv-Networks (Python, Tensorflow, Django)
- Created a DataFlow pipeline to process and segment terabytes of medical imaging data (Python, DataFlow)
- Implemented a Prostate Lesion detector for processing Prostate MRI images using 2D Fully Conv-Networks (Python, Tensorflow)
- Standardized Tensorflow model creation and serving pipeline by creating templates, tests and code standard documentation (Python, Bash)

SAP Innovation Center Brisbane, Qld
Software Engineer - Intern March 2016 | December 2017

- Generating realistic multi-million row data sets for usage in product demonstrations - banking transaction analytics (SQL, Python)
- Created back-end unit tests for data analytics application (JavaScript)
- Clustering of time-series data to group similar customers together based on their transactional behavior (SQL)
- Model creation, testing and hyper-parameter tuning for a Machine Learning Serving API (Tensorflow, XGboost, scikit-learn)
- Feature engineering on multi-billion row transactional data (SQL, Python)
- Optimising SQL query plans and table partitioning to improve back-end performance (SQL)

Independent Math & Physics Tutor Brisbane, Qld
Tutor January 2012 | June 2014

- Tutoring High School and First Year University Mathematics and Physics

Forge Group Perth, WA
Engineer - Intern Dec 2012 | Feb 2013

- Document control management
- System estimations using 3D CAD models

Skills

Programming Languages:	Python, C/C++, Java, SQL, JavaScript, Bash
Technologies:	Docker, Git, Subversion

Projects

Undergraduate Thesis Project *Python, SQL, Tensorflow*
Predicting how many days until a customer will leave a bank based on transactional data using feature vectorisation with seq2seq LSTM Recurrent Neural Networks. (Grade: 91/100)

R-tree *Python* https://github.com/lleewwiiss/R-tree
Built a R-tree indexing system with optimised range and nearest neighbor queries

Spring Graph Algorithm *C++, Python* https://github.com/lleewwiiss/Spring-Graph-Layout
Built spring graph algorithm which outputs an ideal graph modeled using force interactions

Awards

Most Innovative Business Idea Startup Weekend for Health
Wearable for babies to track and analyse health metrics to improve parents quality of life March 2016

Outstanding Academic and Sporting Achievement Ormiston College
Awarded upon graduating with an OP 3 (~97 ATAR) Nov 2011