Chamal Gomes

1/77 Fitzgerald Road, Hallam, Vic 3803 | Chamalgomes166@gmail.com | www.github.com |
www.chamalgomes.ml | 0449532635 | www.linkedin.com

Career Objective

An enthusiastic and energetic actuarial student who enjoys solving real world problems. I am focused on becoming a fully qualified actuary and am keen to deploy my excellent business acumen in a successful actuarial career specializing in advance inference and predictive analytics.

Higher Education

Master of Commerce (Actuarial Science Research)
University of Melbourne
2018 – 2019 July
Bachelor of Commerce (Actuarial Science)
University of Melbourne
2015 – 2017
Institute of Actuaries Australia (IAA)
Exemption for CS1, CM1, CB1, CB2

Awards

- University of Melbourne Commerce Global Scholarship
- University of Melbourne USA travel Scholarship

Coursera|2019

- Deep-Learning specialization
- Reinforcement-Learning specialization

Technical Skills

- Proficient Machine Learning, Deep-Learning and Reinforcement Learning skills.
- Strong Python skills with TensorFlow and Keras Deep-Learning frameworks.
- Git for version control and JIRA for scrum board management and reporting.
- Expert LaTeX skills for documentation.
- Experienced Linux user, inclusive of Linux Distros
- VBA for Excel Automation applications
- SQL database management and information modelling skills
- R programming for deterministic modelling.
- PowerBI for data visualization and reporting.
- Cloud instance configuration and management for data science applications.
- Web scraping with Selenium and variations.

Work Experience

NMG CONSULTING (DEC 2018 – FEB 2019) – Actuarial Intern

- VBA automation of RBC calculation, valuation and Industry benchmarking.
- Engagement in R-Shiny projects for enhanced industry client presentations.
- Assisted actuarial analysts with valuation and solvency calculation for general insurance clients.
- Engaged in mortality projection tool development in R.
- Mining industry data for industry insights and modeling.

NMG CONSULTING (FEB 2019 – APRIL 2019) - Model Developer

- Developed deep-learning models for a European client of NMG Consulting for fraud detection.
- Programmed the relevant python modules for deep-learning models and supervised models.
- Preparation of the project report to be presented to the client.
- Presented key findings to the client upon completion of the study.

Master's Research

Insurance Claims Fraud Detection with Deep-Learning

- Obtained First Class Honors for maters research report, awaiting journal publication.
- Research encompassed the use of Gaussian Restricted Boltzmann Machine (RBM) and Deep-Autoencoders for unsupervised fraud detection.
- Introduced a New Unsupervised Variable Importance sampling methodology with Deep-Autoencoders.
- Autoencoders and RBM performance was benchmarked against industry leading supervised models in fraud detection contextualization.

Projects

Kaggle Generative Image Generation (Ongoing)

- Use of Deep Convolutional Generative Adversarial Networks (GANs) for image generation
- Parallel GPU configuration for training the model on GCP

Recursion Cellular Image Classification (Ongoing)

- Variational Autoencoders is being investigated as the starting point

EY NextWave Data Challenge 2019

- Smart city traffic modeling based on telematics data.
- Boosted Random Forest with left padding performed the best providing highest testing accuracy.

Kaggle Microsoft Malware Detection Competition

- Stacked RBM for enhanced performance in an Autoencoder framework.

Kaggle LANL Earthquake Detection Competition

- Use of Neural ODE along with RNN(LSTM) methodologies for time series prediction.

Kaggle Quora Insincere Question classification Competition

- Use of Bidirectional RNN for enhanced NLP modelling.

SOA (Society of Actuaries) case study challenge (2018) (link)

- Provided actuarial modelling to estimate the inflows and outflows of the long-term care system, taking into account improving mortality, care levels transitions, economic trends, caregiver shortage etc.

UBS Investment Banking Challenge (2018) (link)

- Advised TABCORP on the merits of the potential acquisition of Tatts.
- Recommended acquisition price using different valuation methods.

Bachelor final year project (2017)

- Provide recommendations for the financing of the superannuation fund under, both defined benefit and accumulation plan.