

KAMANI GETTAPOLA

✉ kamanigett@gmail.com

☎ [REDACTED]

📍 [REDACTED]

in www.linkedin.com/in/indrachapa-gettapola

👤 Australian Permanent Resident

EDUCATION

Doctor of Philosophy (PhD.)

Department of Electrical and Computer Systems Engineering,
Monash University,
Australia
2017 – 2021

Bachelor of the Science in Engineering (B.Sc. (Hons))

Electrical and Electronic Engineering
(First Class Honors)
GPA: 3.85 out of 4 (96.25%)
Department of Electrical and Electronic Engineering,
University of Peradeniya,
Sri Lanka
2010 – 2014

Higher Diploma in Information Technology (HDIT)

University of Colombo School of Computing,
Sri Lanka
2011 – 2013

STRENGTHS

Maths, Probability & Statistics
Statistical Modelling
Extract, Transform, Load Data
Data Visualisation and Analytics
Exploratory Data Analysis
Machine Learning
Data Driven Insights for Decision Making
Project Management

A **Data Scientist** with more than four years of experience in collecting, visualizing, and analyzing datasets, and developing machine learning models to interpret and predict outcomes. A problem solver having a strong background in statistical analysis and strong computational skills, providing innovative solutions via critical thinking. Having good interpersonal skills, seek to become a helpful, resourceful, Accountable and an Influential professional in a challenging data scientist position.

EXPERIENCE

Monash University, Clayton, Australia

Oct 2017 – Sep 2021

Doctoral Researcher

- Developed statistical and analytical models to predict the exciton transport rates in quantum emitter-metal nanoparticle hybrid structures.
- Conducted novel research on controlling and directional exciton transport that can potentially improve the effectiveness of relevant applications. Published the findings as journal articles.
- Applied exploratory data analysis on available experimental data sets to identify patterns to develop models and improve the accuracy of the models.
- Technologies used: Python, QuTip, (Jupyter Notebooks, Google Colab), MATLAB, Mathematica, COMSOL,

DataDisca, Melbourne, Australia

Dec 2019 – Jun 2020

Trainee Data Scientist

- Conducted exploratory data analysis and sales forecasting on product sales data sets to identify patterns.
- Conducted time series data analysis on a complex series of sensor data and conducted cluster analysis to provide solutions to a given problem.
- Shared knowledge and insights with data science team members.
- Technologies Used: Linux, Python, NumPy, Pandas, Matplotlib, Plotly, Seaborn, Folium, Leaflet, PostgreSQL, SQL, Scikit-Learn, REST API, Django,

Faculty of IT, Monash University, Clayton

Feb 2020 – Present

Sessional Teaching Associate

- Conducted laboratory sessions, consultations and prepared unit materials and assignments for undergraduate unit Engineering Mobile Applications.
- Worked with student teams as a project manager to help them identify the software development cycle, agile software development and project management.
- Technologies used: HTML, JavaScript, CSS, GIT, Monday

Synopsys Lanka (PVT) LTD, Colombo, Sri Lanka

(Regional RND center of Synopsys Inc. Mountain View, CA USA)

Senior Corporate Applications Engineer

Jul 2016 – Sep 2017

Corporate Applications Engineer

Oct 2015 – Jul 2016

Product Validation Engineer

Nov 2014 – Oct 2015

- Handled the ownership of product validation of new proprietary software developed by the company. Due to comprehensive test plans created and the testing conducted, several bugs and multiple software crashes were avoided.
- Worked closely with customer support engineers to obtain requirements and on-site testing with large scale customers, and to provide a better service than the competitors.
- Created comprehensive test plans based on specifications and conducted unit testing, functional testing, and integration testing of multiple software. Due to a company merger, held multiple product validation responsibilities simultaneously.
- Conducted large RTL design benchmark to conduct build validation and performance.

TECHNICAL SKILLS

Python
SQL (Database, Query)
NumPy, Pandas, SciPy, Scikit Learn,
XGBoost, Tensorflow, Keras
Tableau, PowerBI
Apache Spark, pySpark, (Big Data)
Scala (Functional Programming)
Databricks, Google Colab
Java, C, C++, Visual Basic
Azure (Cloud)
Git, Perforce (Version control)
Linux, Bash, Perl scripting
JavaScript, HTML, CSS (Web)
Verilog, System Verilog, VHDL
MATLAB, Mathematica, COMSOL

ACHIEVEMENTS & AWARDS

Monash Graduate Scholarship (MGS)
and Research Training Program (RTP)
Scholarship
2017 - 2021

Above and Beyond (Team)
Synopsis Inc.
2016

Certificate at Migara Ranatunga Trust
Awards for Best Undergraduate
Industrial Training Projects
2014

Merit Award at Young Computer
Scientist (YCS) Competition –SLASI
2006

IEEEExtreme 13.0 Participation
2019

IEEEExtreme 11.0 Participation
2017

- Created reports outlining the quality of the product and testing to higher administration.
- Worked and collaborated with multiple teams located worldwide. Due to the time zone differences, used project management tools to coordinate work.
- Provided mentorship for several new team members.
- Member of the Nature Club and participated in several environmental conservation programs.
- Technologies used: Verilog, VHDL, System Verilog, GIT, Perforce, Linux, Scripting, Spyglass CDC, Spyglass RDC, VC CDC

Sri Lanka Telecom PLC, Sri Lanka

Oct 2013 – Jan 2014

Trainee Engineer

- Conducted a project to design a control system based on voice recognition using MS speech platform and Arduino development environment.

CERTIFICATIONS

Data@ANZ Virtual Experience Program – ANZ 2022

IBM Data Science Professional Certificate – Coursera 2021

Data Science Project: Using Foursquare to identify best neighbourhoods in Grater Melbourne to visit.

IBM Machine Learning Specialization – Coursera 2021

Exploratory data analysis, supervised learning (Linear and Logistic Regression, Classification using KNN, SVM, Naive Bayes, Decision trees, Bagging, ensemble methods - Random Forest, Boosting) and unsupervised learning, (Clustering – K means, Dimensionality Reduction, PCA, SVD), Deep Learning and Reinforcement Learning (Neural Networks, CNN, RNN, transfer learning, GAN), Time Series and Survival Analysis.

Microsoft Azure Fundamentals AZ-900 Certification 2021

PUBLICATIONS

- K. Gettapola, S.D. Gunapala, M. Premaratne, “Directional energy transport in strongly coupled chiral quantum emitter plasmonic nanostructures”, Journal of Physics: Condense Matter, 33 475301 (2021)
- K. Gettapola, H. Hapuarachchi, M.I. Stockman, M. Premaratne, “Control of quantum emitter-plasmon strong coupling and energy transport with external electrostatic fields”, Journal of Physics: Condensed Matter, 32 125301 (2019)
- K. I. Gettapola, R. R. W. M. H. D. Ranaweera, G. M. R. I. Godaliyadda and M. N. F. Imara, "Location based fingerprinting techniques for indoor positioning," 2017 6th National Conference on Technology and Management (NCTM), Malabe, pp. 175-180 (2017)

OTHER PROJECTS

- Followed the **Stanford CS229 Machine Learning Course by Prof. Andrew Ng.**
- Several machine learning projects conducted for prediction and estimation.
- Participated in Kaggle competitions.

REFERENCES

References can be provided upon request