GAYAN SAMUDITHA

Opposite the Hospital, Maliban Mawatha, Ihalagoda, Akmeemana, Galle, Sri Lanka. 80090

📞 +94-77-92-15-768 ✉ gayansamudithastack@gmail.com in https://www.linkedin.com/in/gayan-samuditha-023013114/ ⚙
github.com/GayanSamuditha 🖥 https://gayansamuditha.webnode.page/

Education

University of Westminster, United Kingdom   Sep. 2015 – June 2019
Bachelor of Engineering Honours in Software Engineering   *69 average, 3.67/4.00 GPA*

Summary

I am a graduate who followed Special Degree in B.Eng.(Hons) Software Engineering from University of Westminster, UK class of 2019. 4+ years of experience in Research and Development, Software Engineering, teaching experience in Higher Education. Engineering expert in Python, Java programming. Hands-on experience in Machine Learning and Deep Learning, Medical Informatics, Biomedical Informatics - Enterprise Level Product Developments in Software Industry, USA

Research Experience

Virtusa Corporation   **Colombo, Sri Lanka**
Intern - Research and Development (https://eraplatform.refined.site/)   *July 2017 - July 2018 (1 Year)*

- AIRIS (Intelligent Requirement Capturing Platform)   Designed to overcome the challenges in conventional requirement gathering methods, enabling a complete and accurate derivative of the current state of a given business process workflow.
- CENTROID (Enterprise-grade AI based Digital Test Automation tool)   Centroid is an end-to-end automation model that aims to provide a mechanism for both nontechnical and technical users to automate and allows management of agents across a distributed farm of hosts.
- ACCELLO (Accelerating Software Robotics)   Supports distributed parallel execution (Distributed Systems) across a range of technologies including web, Message Queues and mobile apps.
- LUMOS (Intelligent Requirement Clarity Assessment Framework)   Intelligent analysis and deep-learning to ensure requirement. The AI recommendation engine pair's developers most suited to work on a given requirement.
- Lumos Test (Complete Test Management and Test Optimization)   A seamless and simplified journey from test case creation to test execution. Provides complete traceability between requirements-test cases – defects.
- Lumos Defects (Smart Defect Assessment and Triaging)   Intelligent analysis automatically recognizes the defect injector and ensures the fix is addressed by the most suited developer.
- Smart ALM - Scrum   Virtusa's Lumos-Scrum tool is equipped with an efficient virtual space where the scrum master is able to carry out virtual daily scrum sessions as well as track individual tasks of the associates.
- Smart ALM - Requirements   At Virtusa, the Requirement Clarity Index (RCI) is used for this purpose and serves as a benchmark to validate the quality of the requirements introduced by any business analyst to a project.
- InsightLive SDLC (Enterprise Dashboards for Agile Empowerment)   Intelligent analysis automatically recognizes the defect injector and ensures the fix is addressed by the most suited developer.
- InsightLive Gamified Dashboard   Promotes transparency, quality, and productivity of development teams and track how the tools compares to another set. Find and measure the effectiveness of the digital transformation assets.
- AITEST (Intelligent Test Management and Optimization Tool)   AITEST is a ML based Test Case Management and Test Optimization plugin developed by GTO, Advenced Technology Center at Virtusa.

Professional Experience

Virtusa Corporation   **Client Side - British Telecommunication, United Kingdom**
Associate Software Engineer - Platform Engineering   *December 2019*

- BT client Telecommunication Domain Micro-services, Telco platform Engineering and Development.

Virtusa Corporation   **Client Side - Modjoul Engineering, Clemson SC, USA**
Software Engineer - Product and Platform Engineering

- Platform- Design and Implement data analytical dashboards and Machine Learning models to evaluate the IoT devices data. https://www.virtusa.com/success-stories/aws-based-iot-data-aggregation-analytics-platform

Virtusa Corporation   **Client Side - Iron Mountain, Boston, USA**
Software Engineer - Research and Development

- Developed content services platform that provides actionable business insights and predictive analytics through Machine Learning (ML) -based classification of a company's physical and digital information, which adds structure, context and meta-data to information to make it more usable. https://www.ironmountain.com/services/secure-shredding

Virtusa Corporation   **Client Side - Iron Mountain, Boston, USA**
Senior Software Engineer - Product Development   *Present - November 2022*

- Product for midsize businesses for shredding and Machine Learning-based platform for content management. https://www.ironmountain.com/resources/whitepapers/p/powering-your-content-with-ai-whitepaper

University of Westminster   **London, United Kingdom**
Visiting Lecturer   *2022 - Spring*

- 6SENG002W - Concurrent Programming, 6COSC023C - Final Year Research Project

Research Projects

* Intelligent Solution for Early Stage Prediction of Cardiovascular Diseases Using Artificial Intelligence - LSTM, Visualizations, Multi-Agent Systems, Classification, Cardiovascular Diseases

* Detection of Changes in Mindfulness by Monitoring Meditation Sessions Using Artificial Neural Networks - Multi-Agent Systems, Machine Learning, Deep Learning, Neurology, Neuroscience, Meditation

* Deep Learning Medical Imaging for Early Clinical Stage Identification of Diabetic Retinopathy Detection - Deep Convolutional Neural Network, Classification

* Approach of Convolutional Neural Network to Classify the Level of Heart Ejection Fraction from Echo EHR Data - Cardiovascular Diseases, Clinical Trials, Electronic Health Records (EHR), Echocardiography, NLP, Text Classification

* Deep Learning Based Early Stage Clinical Detection of Tuberculosis Diseases Using Chest X-Rays - Deep Learning - Convolutional Neural Networks, Classification

Technical Skills

Languages: Python, Java, JavaScript, HTML/CSS, SQL, SQL, C-Sharp
Frameworks: Tensorflow, Keras, NumPy, SciPy, Pandas, Matplotlib, Seaborn, Java JADE framework, Python SPADE framework, NLP (NLTK, Stanford NLP)
Technologies/Frameworks: Linux, Jenkins, GitHub, JUnit, SonarQube, Spring, SpringBoot, Microservices, OAuth
Cloud: AWS, Google Cloud Platform, Azure Cloud
ML Models: CNN, LSTM, RNN, DNN, GAN, Transformer, Encoder-Decoder, Clustering, Ensemble

Research Publications

* Intelligent Solution for Early-Stage Prediction of Cardiovascular Diseases Using Artificial Neural Network and Multi-Agent Modelling - ICTER 2022 (https://www.icter.org/) - ACCEPTED, Conference Date - 30th November 2022

* Deep Learning Medical Imaging for Early Clinical Stage Identification of Diabetic Retinopathy Detection - ICARC 2022 (http://www.icarc.sab.ac.lk/) - Submitted, Notification - Pending

* Deep Learning Based Early Stage Clinical Detection of Tuberculosis Diseases Using Chest X-Rays - ICACT 2022 Submitted, Notification - Pending

University Teaching Experience

* TA - Object Oriented Programming, Concurrent Programming, Advanced Server Side Programming, Machine Learning, Conducted Data Engineering and Data Science Practical Sessions for Final Year Undergraduates

* Westminster Connect - Westminster Alumina Volunteer for Students One-to-One Mentoring, Career Adviser

* Research Advisor - Machine Learning, Deep Learning, Reinforcement Learning, Data Science, Medical Informatics

Honors and Awards

* Product Innovation Award - Research and Development at Virtusa Corporation - Outstanding recognition of innovation and contribution towards developing ACCELLO Product

* Product Innovation Award - Research and Development at Virtusa Corporation - Outstanding recognition of innovation and contribution towards developing CENTROID Product

* IoT Hackthon - IIT Hackthon 2017 - Runners Up

References

Dr. Sachitha Kusaladharma, PhD (University of Alberta), BSc.(Hons) Engineering - kusaladh.kusaladharma@utoronto.ca

Mr. Achala Chathuranga Aponso, Senior Lecturer, Level Coordinator, Informatics Institute of Technology - achala.a@iit.ac.lk

Mr. Pramodh Chamalka Sendhanayake, Architect Technology, Virtusa Corporation - pcsendanayake@virtusa.com