SURENDRAN SELVARAJU
surendranmmu@yahoo.com

Apartment Desa Jati, Nilai ●+6010-3693430

EDUCATION

Multimedia University

M.Sc., Information Technology **Dissertation: Feature and Opinion Extraction on Malay Online Text**	**2015 – 2019**
B.Sc., Bioinformatics	**2011 – 2014**
Micromaster in Supply Chain Management (MUST University)	**2020**
Certificate: Certified Data Science Specialist (iTrain)	**2020**
The Data Science Course 2020: Complete Data Science Bootcamp (Udemy)	**2020**
Certificate: Coursera Course Certificate **Machine Learning: Classification** **License MJXDTBZMQXCQ**	**2018**
Introduction to Data Science in Python **License XRC53XN2ZYQH**	**2018**
Applied Text Mining in Python **License MKYVSW5Q7XPV**	**2018**
Python Programming: A Concise Introduction **License C9Q2V85663AD**	**2018**
Machine Learning Foundations: A Case Study Approach **License DPH7JVEGD242**	**2017**
Practical Machine Learning **License MBEPW4VWQD56**	**2016**

WORK EXPERIENCE

Machine Learning Research Officer (MMU : Telekom Sentiment Project)   **Oct 2014- Apr 2018**

- Research and develop statistical learning models for text mining.
- Collaborate with product management and IT departments to understand company needs and devise possible solutions.
- Keep up-to-date with latest technology trends.
- Implement new statistical or other mathematical methodologies as needed for specific models or analysis.
- Use analytical models to identify insights that are used to drive key decisions across the organization.
- Find and implement the right algorithms and tools for NLP tasks.
- Extend ML libraries and frameworks to apply in NLP tasks.
- Develop NLP systems according to company requirements.
- Collect, process and validate data from internal and external data sources. Build and/or utilize toolsets and set up processes for extracting information from unstructured data.
- Train the developed model and run evaluation experiments.
- Build and maintain data driven optimization models, experiments, text mining algorithms.
- Partner with other researcher to validate and fine tune the model with experimentation.
- Assist and adhere to enforcement of project deadlines and schedules.
- Routinely communicate metrics, trends and other key indicators to team lead.
-

Lecturer in LimKokWing University (Student Coordinator)   **Oct 2017-Dec2018**

- Responsible for carrying out teaching and research duties in Artificial Intelligent and Business Intelligent.
- Involved in the administration of degree and foundation courses as well as responsible for organizing lectures and supervising seminars and tutorials.
- Responsible for carrying out teaching and research duties in Artificial Intelligent and Business Intelligent.
- Involved in the administration of degree and foundation courses as well as responsible for organizing lectures and supervising seminars and tutorials.
- Involved in the research and designing of new courses and materials.
- Assessing students course work and material.
- Involved in the setup of exams and the marking of results.
- Responsible for the departmental administrative tasks.
- Providing mentoring, advice and support to students on a personal level.
- Implementing University research projects.

- Prepared monthly and yearly reports for senior management team.
- Actively leading class discussions and encouraging debate.
- Involving local student recruitment and marketing team.
- Actively joining education fair to promote and provide consultation to students.
- Conduct and manage events and workshops for International students.

Data Analytics/Data Scientist/ Data Analyst in Sapuraenergy Berhad

<div align="right">Jan 2019-Present</div>

- Lead and / or support 1 to 4 projects in the area of BI & Analytics.
- Engage with global stakeholders and translate business requirements & solutions into BI / Analytics solutions and requirements.
- Use analytical models to identify insights that are used to drive key decisions across the organization.
- Build and maintain data driven optimization models, experiments, forecasting algorithms and capacity constraint models.
- Leverage tools such as Python, PowerBI, Excel, Spark and Scikit-learn to drive efficient analytics.
- Work cross-functionally to define problem statements, collect data, build analytical models and make recommendations.
- Governs Material Master and Vendor Master data in SAP and Symphony.
- Create Material in SAP for business project for PR requester.
- Register supplier in supplier registration system in Symphony.
- Govern and assess the registered supplier status.
- Apply statistical and descriptive analysis using python in PowerBI and Jupyter Notebook for spend data and other reporting data.
- Perform web scraping using BeautifulSoup, TweetScraper and PowerBI.
- Perform Sentiment Analysis on organization Tweets data for feedbacks and opinions mining.
- Utilizing PowerBI and Python for SAP data Governance.
- Building real time reporting connecting SAP, Business Warehouse and PowerBI.
- Building real time reporting connecting SharePoint, Business Warehouse and PowerBI.
- Create SharePoint List and govern using Microsoft access and perform calculation column using DAX to automate calculation columns.
- Create workflow in SharePoint using Power Automate to automate weekly summary report and auto alert email.
- Support digital transformation by analyze and model structured and unstructured data using advanced statistical methods and implement algorithms and software needed to perform analyses.
- Support digital transformation by building and deploying deep learning models for engineering material groups classification.

- Lead in e-auction in ARIBA platform.

Machine Learning Engineer in OMDENA   **Aug 2020 – Nov2020**

- Modeling economic well-being in India with the World Resources Institute.
- In this two-month project, joining a global team of up to 50 change-makers to build machine learning models on economic well-being.
- Use **publicly** available satellite imagery and other ground data to innovate current approaches.
- Perform data acquisition and feature engineering.
- Use **various** analytical models to identify insights.
- Train models that learn features related to urbanization and to changing agriculture to give a better understanding of economic well-being in an area.
- Perform model optimization and tuning.
- Work on data science cycle from end to end.

Lead Machine Learning Engineer in OMDENA   **Nov2020-Present**

- Analyzing the Role of Connectivity on Economic & Human Development with (United Nation Development Plan) UNDP.
- In this two-month project, joining a global team of up to 50 change-makers to build deep learning models.

- Perform data acquisition and feature engineering.

- Perform EDA using statistical and non-statistical to obtain significant insight.

SKILLS

- Programming languages: C++, Phyton, C#, R language
- Python, iPhyton, yTextminer, Rtext Tool, Weka, Spark, Spacy, NLTK, scikit-learn, Numpy, Scrapy & BeautifulSoup (web scrapping), Jupyter Notebook, TensorFlow 2.0, Flask
- Data Mining Techniques, Machine Learning Algorithms
- Sap MM, Sap BW, SharePoint, Symphony, MySQL
- Microstrategy, PowerBI, Google Analytics

RESEARCH INTERESTS

- **Sentiment Mining**
- **Conditional Random Field**
- **Personalized Information Retrieval**
- **Machine Learning**
- **Deep Learning**
- **Text processing**
- **Data Science**

Projects/Competitions/Conference

- **Shopee Code League 2020 (competition)**
- **Machine Learning with Matlab(Techsource Asia)**
- **Asia Pacific Industry Leadership Forum (Databricks)**
- **Cloudera Cloud Platform (ASIA) Conference**
- **Building Artificial Intelligence through Collaborative Innovation (with NASA and Open Assembly)**
- **A Chief Data Scientist's Advice on A.I**

JOURNAL PUBLICATIONS

- S. M. A. Kalaiarasi, S. Surendran, and K. K. Jaya, "The Generation of Malay Lexicon" **American Journal of Applied Sciences**, vol. 14, pp. 503-510, 2017.
- Selvaraju, S., & Anbananthen, K. S. M. (2019). Opinion Extraction on Online Malay Text. **American Journal of Applied Sciences**, 16(4), 134-142.

LINK

- **https://github.com/Sureniology**
- **https://www.linkedin.com/in/surendran-selvaraju-b8040185/**

AWARDS

- **Gold medal ITEX'16**

- **Gold medal MMU INOVATION'16**

- **Silver medal PENCIPTA' 15**

REFERENCES

Assoc. Prof. Dr. Kalaiarasi Sonai Muthu Anbanathan
Associate Professor
Faculty of Information Science & Technology
Multimedia University
Bukit Beruang - 75450, Malaysia
06-2523344
kalaiarasi@mmu.edu.my

Assoc. Prof. Dr. Omar
Faculty of Information Science & Communication Technology
Limkokwing University
Cyberjaya - 63000 Cyberjaya
03-8317 8888
omar.abouabdalla@limkokwing.edu.my

Rodney Edward Casmiro Barretto
Head, Assets & Operation Procurement, Supply Chain
Sapuraenergy Berhad
03 8659 8580
rodney.barretto@sapuraenergy.com

Mohammad Iqbal Hakim Ibrahim
Manager, Catalogue Management,
Gtssc-Supply Chain-Performance Sys Suppt
Sapuraenergy Berhad
03 8659 8044
iqbalhakim.ibrahim@sapuraenergy.com