

SURENDRAN SELVARAJU
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Apartment Desa Jati, Nilai • +6010-3693430

EDUCATION

Multimedia University

M.Sc., Information Technology

2015 – 2019

Dissertation: Feature and Opinion Extraction on Malay
Online Text

B.Sc., Bioinformatics

2011 – 2014

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

TEACHING EXPERIENCE

Multimedia University

Teaching Assistant for Assoc. Pro. Dr. Kalaiaarasi

Tutored “Software Engineering” and “Data Mining” courses to Degree’s
students.

2016 - 2017

Teaching Assistant for Mr. JayaKumar Krishnan

Tutored “Network Security” course to Degree’s students

2015 –2016

SPM tutor (Bio, Physic, Chemistry, Add Maths)

2012 –2017

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

Jan 2019-Present

- 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.
- Building and implementing AI models to meet business needs.
- 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 calculated column 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 machine learning techniques.

- construct and build deep learning method for new material hierarchy to map with historical material data.

SKILLS

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

RESEARCH INTERESTS

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

JOURNAL PUBLICATIONS

- S. M. A. Kalaierasi, 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

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Mohammad Iqbal Hakim Ibrahim

Lead, Catalogue Management,

Gtscc-Supply Chain-Performance Sys Suppt

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