

Siddesh Sambasivam Suseela

Graduate software engineer & Machine learning practitioner

Latest start date: January 2023

RELEVANT WORK EXPERIENCE

Shopee, Singapore – Backend Engineer Intern

October 2021 - March 2022

- Improved vector retrieval speed for product search by **10%**
- Developed internal platform to **manage 10+ ML model** configs
- Setup monitoring using **prometheus** and **grafana** for vector retrieval engines

Datlite, Singapore – Founder & Lead Developer

March 2021 - March 2022

- Acquired funding of **S\$5000** from NTU SCSE Innovation lab
- Managed a team of **6 engineers** and **5 business members**
- Centralised platform to track ML experiments, models & datasets

NTU, Singapore – Software Engineer

February 2021 - July 2021

- Increase search relevance by **100%** by building a **natural language search system**

Shopee, Singapore – Data Science Intern

May 2020 - Jan 2021

- Trained **language agnostic embedding** model for **8+ languages**
- Optimized similarity search using FAISS to mine translation pair

SELECTED PROJECTS

Shillings – Web service + Payment APIs

Tech stack: Golang, MySQL, Redis, Nginx, Docker, Protocol buffers

- Build backend system that mocks **payment service** using **Golang**
- Designed and coded a **custom TCP/IP communication protocol**
- Integrated **NGINX** for load balancing client requests to web server

Detox – Web service + Natural language processing

Tech stack: Python, Tensorflow, Flask, Nginx, AWS.

- Trained and deployed a **profanity filtering system** on AWS
- Integrated the filtering system on **discord** and **twitter**.

Learnify.AI – Web application + Applied ML

Tech stack: Python, React.js, MongoDB, Flask, PyTorch.

- Build an interactive app to **visualizes notes as knowledge graphs**.
- Implemented **keyword extraction** and **summarization models**.

TECHNICAL SKILLS

- **Programming Languages:** Python, Javascript, Go, C++, Java.
- **Development:** Git, Shell, React.js, Node.js, Docker, Flask, Nginx.
- **Database:** MongoDB, SQL, ETCD, Redis, Elasticsearch.
- **Cloud:** Amazon web services, Google cloud platform, Netlify.
- **Machine Learning:** PyTorch, Tensorflow.
- **Monitoring:** Prometheus, Grafana.

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EDUCATION

Nanyang Technological University (NTU), Singapore.

Bachelor's in Electrical & Electronic Engineering

July 2018 - December 2022

- Second Major in Business
- Specialising in Data Intelligence and Processing.

CO-CURRICULARS

Major League Hacking

MLH Explorer Fellow

February 2021 - April 2021

NTU Open Source Society

Chairperson of TGIFHacks

August 2020 – August 2021

NTU Electrical and Electronic Engineering Club

Vice President (Student development)

September 2019 - September 2020

RELEVANT COURSEWORK

Software Engineering

Data structures and algorithms

Computer communications

Web application design

Microprocessors

Cybersecurity

Intelligent system design

Machine learning

Artificial Intelligence & data mining

PUBLICATIONS

Siddesh Sambasivam Suseela & Yang Feng. *A comparative study on Machine Learning algorithms for Knowledge Discovery.* 2022.

CONDUCTED WORKSHOPS

An Introduction to PyTorch

Natural Language Processing 101

Data cleaning & scraping