SIDDESH SAMBASIVAM SUSEELA
SiddeshSambasivam.com • siddesh002@e.ntu.edu.sg • (+65) 8345 7066

EDUCATION

Nanyang Technological University   Aug 2018 - Nov 2022
Bachelor of Engineering (Electrical and Electronic Engineering)
- Second major in Business.
- Specialisation: Data Intelligence and Processing.

RELEVANT WORK EXPERIENCE

Shopee, Singapore   Oct 2021 - Mar 2022
Backend engineer Intern
- Designed the system and drafted the technical document for the admin portal for marketplace intelligence team.
- Developed both the frontend and backend portal for the vector retrieval engine.

Datlite, Singapore   Mar 2021 - Mar 2022
Founder/Chief Product Officer
- Designed and built a centralised platform that provides a suite of machine learning tools for tracking and improving experiments, models and datasets.
- Engineered the backend services with amazon web services and frontend with react and redux.
- Managed and lead an engineering team of 6 members and a business team of 4 members.

Nanyang Technological University, Singapore   Feb 2021 - Jul 2021
Software Engineer
- Developed a web application with React.js and serverless backend with Firebase.
- Built and deployed a natural language search system on an EC2 instance to fetch relevant research papers.

Shopee, Singapore   May 2020 - Jan 2021
Data Scientist Intern
- Built a language-agnostic embedding model with PyTorch on 8 languages.
- Optimized similarity search using FAISS to mine translation pairs from a monolingual corpus.
- Improved the performance of baseline NER model with Roberta model using PyTorch and HuggingFace library.

SELECTED PROJECTS

Matterix - *Deep learning framework*
Tech stack: Python, NumPy.
- Developed a python package for automatic differentiation module to compute derivatives using numpy.
- Developed optimizers (SGD with momentum), activation functions (sigmoid, tanh, relu, softmax) and loss functions such as cross-entropy loss, MSE, RMSE.

Learnify.AI - *Web application*
Tech stack: Python, React.js, PyTorch, Flask, Bcrypt, Yake, Scikit-learn, Pandas, MongoDB.
- Built a web application for students using React.js to visualize notes as a knowledge graph.
- Implemented keyword extraction using spacy and finetuned a summarization model to summarize notes.
- Designed the API endpoints for authentication and other services in Flask.

NewscastAPI - *Web service*
Tech stack: Python, Flask, Scrapy, APScheduler, MongoDB, AWS.
- Built a scheduled web crawler to scrape news from various sites (google news, Bloomberg, Reddit).
- Designed an API endpoint using Flask query methods for arguments provided by the user and deployed it in AWS.

RELEVANT SKILLS

Programming Languages: Python, Javascript, Go, C++.
Development: Git, bash, React.js, Next.js, Tailwind CSS, Node.js, MongoDB, GraphQL, Flask, Redux, Docker.
Cloud: Amazon web services (AWS), Firebase, Netlify, Heroku.
Machine Learning: PyTorch, Tensorflow, Scikit-learn, Fairseq, NumPy, Pandas, FastAI, Spacy, HuggingFace.
Software applications: Adobe premiere pro, Adobe After effects, Figma.

LEADERSHIP

NTU Open Source Society, Singapore   Aug 2020 - Aug 2021
Chairperson of TGIFHacks Committee
- Organised weekly tech workshops every Friday on topics such as web development to machine learning.

NTU Electrical and Electronic Engineering Club, Singapore   Sep 2019 - Sep 2020
Vice President (Student Development)
- Led a team of 15 in various student development projects/events with the school management.
- Establish closer ties with industry partners for EEE career events.