Wang Yanbao

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EDUCATION

Singapore University of Technology and Design (SUTD) **Singapore**
- Bachelor of Engineering (Computer Science Design), Honours with Highest Distinction (GPA: 4.71/5) **May 2020 to Present**
- Relevant Courses: Information System Design & Programming, Engineering Software Construction, Algorithms, Computational Structure
- Expected Date of Graduation: August 2024

Scholarship Program – Senior Middle 2 (SM2) **Singapore**
- Full undergraduate scholarship offered to top-performing students (top 5%) in China **July 2019 - present**

SKILLS

- Programming Languages: Python, Java, JavaScript, C
- Data Process Tools: Pandas, SQL
- Web Development: HTML, CSS, DiscordJS, Flask
- Software Development Lifecycle and Methodologies
- Linux Operating System
- Android App Development: Java, Google Firebase
- Knowledge of Algorithm and Data Structures
- Knowledge of Deep Learning (TensorFlow and PyTorch)

WORK EXPERIENCES

Harvest Fund **Beijing, China**
AI Developer Intern **June 2021 to August 2021**
- Realize new natural language processing technologies in reports from J.P. Morgan and train an SBert model using python with descriptions from financial analysts to analyze the trends of the stock market.
- Use Pandas in python to perform data processing jobs on a large corpus of sentences from financial analysts including cleaning the data, preprocessing the raw text, and splitting the dataset based on specific information.
- Apply umap + hdbscan to reduce the dimension of tokenized text and cluster the text into different topics (industries), visualize the result with matplotlib in python to track popular industries during the past few years.

Lawify **Singapore**
AI Developer part time **October 2021 to January 2022**
- Develop a deep learning model for extracting basic information in a given contract to release lawyers from this tedious work.
- Preprocess the text in the dataset by kicking off the weird characters from the raw text generated by pdfplumber using regular expression and python to ensure the text is in a trainable format.
- Train Roberta-base model with more than 1000 contracts using AWS SageMaker and achieve a precision above 90%.
- Embed the model to a web application with Flask to enable interactions between users and the system.

ACADEMIC PROJECTS

"Pick Before Go" – Android App Design **Singapore**
Full Stack Developer **January 2022 to April 2022**
- Work in a team of 7 to build an Android app to improve customers' shopping experience in Pick & Go.
- Design a user-friendly interface using Figma and dynamically display the layout using Recycler View and Adaptor in Java.
- Implement several features in the app using Java including showing products in promotion, showing product stock information and restock time, marking a product as a favorite, and logging in as a user/admin.
- Connect the app with Google Firebase for updating data in real-time to provide customers with the most accurate information.
- Project link: https://github.com/wangyanbao666/SUTD-CSD-Term4-50.001-1DProject-PickBeforeGo

"XPLOSION" - Electronic Game Design with FPGA **Singapore**
Backend Developer **January 2022 to April 2022**
- Design a CPU and implement the CPU to build an electronic game to control the logic flow of the game.
- Implement 4 components of CPU: Control Unit, ALU, Datapath and Regfiles with FPGA by coding in Alchitry Au, which enables the CPU to receive signals and make response according to the signals.
- Connect the FPGA with input and output devices like LEDs and buttons and encapsulate everything with a player-friendly interface.
- Source code: https://github.com/wangyanbao666/comp-struc-1d
- Video: https://drive.google.com/file/d/1pYSdrqYH_wjjYCmcN36PWS4M6cNZIGnp/view

ICU Number Prediction Under Covid Situation **Singapore**
project leader **October 2021**
- Collect relevant data from different resources and perform data explorations using pandas and matplotlib in python to find possible factors that affect the number of people in ICU per day.
- Build a machine learning model to predict how the ICU number changes from with respect to those factors. Improve the performance of the model by transforming the data and changing parameters of the model.

CO-CURRICULAR ACTIVITIES

Guitar Club **Singapore**
President **May 2020 to present**
- Organize regularly weekly training sessions and perform during lunch time performance in the university.
- Collaborate with SUTD bands to hold sharing sessions and teach basic skills of guitar fingerstyle.

IES Club **Singapore**
Project Manager **May 2020 to May 2022**
- Hold a machine learning and quantum machine learning workshop series (5 lessons) and be an instructor in charge of the quantum machine learning part in which more than 100 people attended.
- Hold an algorithm competition and teach common algorithm problem solving skills in SUTD family to prepare the first-year students for future algorithm learning. More than 30 people showed up in that event.

ADDITIONAL INFORMATION

- Language proficiency: Proficient in English and Mandarin
- Guitar fingerstyle player
- Participate in Shopee Code League 2020 and 2021