Yelmagambetov Azamat

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EDUCATION

City University Of Hong Kong **Sep 2019 – May 2023**
B.S. in Data Science - ***CGPA - 3.68*** *Hong Kong*

- **Relevant Coursework:** Linear Algebra, Multi-variable Calculus, Advanced Statistics, Convex optimization, Data visualization, Database systems, Big Data, Machine Learning, Financial Engineering, Financial Data Analytics, Data Intelligence in Action, Computer Vision.

EXPERIENCE

AI Mnemonic, Startup **Dec 2021 – Jan 2022**
AI Programmer *Hong Kong*

- Study and Analysis of Photoplethysmography (PPG) data. Find patterns in data that would help to extract blood pressure from PPG signal
- Converted Matlab code to Python for feature extraction, noise filtering and machine learning algorithms.
- Trained and tested the machine learning models for the estimation of the Blood Pressure using PPG signal.

Department of Information Systems, CityU **Mar 2020 - Dec 2020, Oct 2021 - Dec 2021**
Research Assistant *Hong Kong*

- Used Python's Data-Science toolkit to examine and generate insights on a dataset of Academic Journals.
- Built a webscraping tool to collect Kaggle and Linkedin user profiles using Selenium, BS4.
- Study importance of teams formation and collaboration for success in Kaggle competitions using its publicly available metadata.

Department of Mathematics, CityU **Jul 2020 – Aug 2020**
Research Assistant - Image Segmentation Project *Hong Kong*

- Worked with a research group to test MLP and U-Net neural networks for segmentation of glomeruli in microscopic images of kidney.
- Studied Virtual Adversarial Training (VAT), a semi-supervised training algorithm. Incorporated VAT loss along with U-Net's cross-entropy, to improve segmentation accuracy.

TECHNICAL SKILLS

Programming Languages: Python, SQL, C++ (Beginner), Matlab
Python Libraries: Pandas, NumPy, SciPy, Matplotlib, Seaborn, Scikit-Learn, OpenCV, PyTorch.
Technologies/Tools: Linux, GitHub, PostgreSQL, Tableau, Git, VS Code, Jupyter

PROJECTS

Sustainable Investments Data Aggregator **May 2022 - Present**

- Our team has received a seed fund of HK$100,000 under the HK Tech 300 Programme. We are currently working on developing a data aggregator platform that would use NLP model to predict companies' ESG scores through financial reports and news.
- Tested numerous NLP techniques (topic modelling, NER), frameworks (NLTK, GenSim, etc), and services (AWS textract) to create an NLP data pipeline that would meet project requirements.
- Tested and fine-tuned different NLP models for sentiment analysis (FinBert), Q&A (Roberta), information extraction and other tasks.

Champion of CityHack 2022, FinTech Track **Jan 2022**

- Developed a ESG data aggregator platform demo that uses NLP model to predict companies' ESG scores through reports, news.

PetFinder.My - Kaggle Contest **Nov 2021 - Dec 2021**

- Implemented an algorithm to predict the "Pawpularity" score (i.e. cuteness of a pet on a 0-100 scale) of a thousands of a pet photos.
- Transfer learning using Resnet-50, and EfficientNet B0 on stratified 5-folds CV. Minimized RMSE by applying stronger augmentations, hyperparameter tuning and better learning rate scheduling.
- Attempted to treat a problem as a classification, by scaling a target and using Binary cross-entropy loss.

AWARDS/ACHIEVEMENTS

- Awarded Dean's list in 3 semesters for excellent academic performance.
- Awarded a Top Scholarship for International Students for 4 years.