Shubham Nimbalkar

Irvine, California 92614 | (949) 539-6649 | srnimbal@uci.edu | LinkedIn | Github | (Apple Intern)

Education

University of California, Irvine
Master of Computer Science **September 2021 - December 2022**

Pune Institute of Computer Technology
BE in Computer Science **August 2014 - August 2018**

Technical Skills

C++, Java, Python, Swift | Cloud management, Docker (+compose), Git, JIRA | Bash, Awk | Computer Vision, NLP, Data Analytics | Tensorflow, Keras, Pytorch | Spark | Linux, Mac, Backtrack, Kali | Mysql, Mongo, Elastic Kibana, Superset

Professional Experience

Apple

Software Engineering Intern **June 2022 - September 2022**

- Creating splunk dashboard for teams to visualise and drilldown on code quality metrics to improve coverage
- Worked with advanced internal frameworks to automate and upgrade manual jobs in test pipeline
- More projects in the works until september 2022.

Rakuten (ECommerce)

Software Engineer **September 2019 - July 2021**

- Developed end-to-end Campaign Intelligence Platform to boost ad-based and campaign sales by 5%
- Designed **data pipeline** and cloud infra using **spark**, **elastic** and **SQL** to fetch and co-relate 20 GB of data daily
- Built a frontend with **HTML, CSS** for marketing team with scalable performance using **Kubernetes** and **Docker**
- Analysed empirical data and competitor insights to expand user base and provide targeted incentives
- Created LSTM based **sales predictor** to visualise sales 2 weeks into the future with more than 70% accuracy
- Mentored development team to learn **python**, basics of Machine Learning and analysing raw data

Rakuten Institute of Technology (R&D)

Research Trainee **January 2019 - August 2019**

- Face Liveness Detection for Rakuten Pay - A **face authentication projec**t to make secure payments by thwarting 2d and 3d masked attacks. Collected face depth data of 300 people by IR sensor using python to create LFW dataset
- Completed a research project under guidance of Research Scientist, Nithish Divakar to describe an image with tags ranked by visual importance. Designed **web application** to upload images and inference the **AI model**.
- Aesthetic and Visual Analysis - Proposed automated video metadata extraction to OTT platforms (like Viki/Rakuten TV) to reduce human annotation effort by 90%.
- Created an **AI pipeline** to process a video and output good quality, distinct and scene classified posters of movies
- Partnered with researchers in APAC and EU regions for development and group discussions

Rakuten Ichiba

Intern **September 2018 - December 2018**

- Built Item bundle **recommendation engine** (where input is a merchant's shop catalogue of more than thousand items and purchase history) to boost cross-item selling using TF-IDF
- Analysed merchant's selling history, tokenized japanese text and created a similarity scoring matrix for catalogue
- Developed a hierarchical server health **monitoring and alerting system** 'CEAT', which reduced the server downtime and empowered engineers to take action before any server crash (Similar to APM systems)
- Created **node-link graph** using **java** to understand server dependency and failure impact
- Organized knowledge sharing sessions to discuss NLP concepts in machine learning

Projects and Recognition

Plant Disease Detection Using CNN and GANs | Python, Image processing, App development

- Co-Authored and presented research paper at ICIRD 2018, Thailand (IEEE and Scopus)
- Winning project in ML/AI domain at INC event, PICT and Runners up at Quark event. BITS Pilani

Typist DNA | Python, Java, Machine Learning - An authentication system to verify password by analysing typing patterns with clustering techniques using keystroke metadata as data points

NDCG Metric Calculator | Python - Created a script to to evaluate NLG models accuracy using NDCG formula | Github

Face Crop - Extract frontal-face frames from a photo or video using haar cascade filter | Github

Myntra Datawarriors 2018 - Got 33rd rank of 2600 participants for image classification problem in ecommerce

Ericsson Foresight ML 2019 - Got 61st rank of 2500 participants for scoring user ratings using regression methods