

# Pritom Kumar Mondal

## Software Engineer

Hardworking, solution oriented software developer skilled in leadership, problem solving and pressure handling. Looking for internships and full-time opportunities in the field of software engineering.

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## EDUCATION

### Shanghai Jiao Tong University (2018-2021)

Master of Science, Computer Science

- Shanghai Jiao Tong University Scholarship, Top 5%

### Fudan University (2014-2018)

Bachelor of Science, Software Engineering

- Chinese Government Scholarship (A type), Graduation Ceremony Speaker

## WORK EXPERIENCE

### Machine Learning Intern at NOMURA (July 2020 - August 2020) | Ranking Prediction

- working to develop a machine learning based ranking prediction system
- technologies using: python, mssql, flask, etc.

### Intern at Guo Yi Xian Technology (January 2018 - May 2018) | Automatic Forklift System

- added new drag & drop, resize component features using PixiJS
- implemented Dijkstra's algorithm to find the shortest path for the Forklifts
- added front-end to the back-end
- improved the readability of existing code

### Intern at NOMURA (July 2017 - October 2017) | Status Monitoring System

- created new functions using REST API for the monitoring system
- created a JS based web interface to project the database information
- made proper documentation of the project.
- technologies used: Gemfire, JMS, OQL, Maven, Spring etc.

## PROJECTS

### Network Traffic Classification (Ongoing Research Work)

- collected more than 300K network packets from the lab. Using nDPI analyzed the packets.
- implemented supervised machine learning algorithms to make the network traffic classifier. The accuracy already improved by at least 2%.
- grouped similar applications according to CoS rule. Which eventually made a significant impact on the classifier accuracy.
- project url: <https://github.com/pritom007/Network-Traffic-Classification>

### SearchFlow (Search Engine Project)

- made an efficient crawler that collected more than 3 Million questions and answers from Stackoverflow.
- using the crawled data trained classifier to detect the types of search. Got 90% accuracy for DNN model which made the search feature dynamic.
- added top search feature, fixed bugs and maintained the quality of code. Wrote the documentation/report of the project.
- project url: <https://github.com/KevinCT/SearchFlow>

### Disease Prediction and Classification (Using Gene Data)

- implemented PCA to reduce the dimensionality of the data-set.
- implemented SVM, DNN and Logistic Regression algorithm and compared the accuracy of classifiers.
- project url: <https://github.com/pritom007/BioInfoML>

### Data Mining

- created Facebook data scraper using selenium. The scraper is able to collect data from official pages, send messages and post in the Facebook wall.
- url: <https://github.com/pritom007/FacebookParser>
- created Bengali newspaper scraper. Collected nearly 5 years of news data.
- url: [github.com/pritom007/Bangla-Newspaper-Scraper/blob/master/prothomalo.py](https://github.com/pritom007/Bangla-Newspaper-Scraper/blob/master/prothomalo.py)

## PUBLICATIONS

- **Forecasting popularity of the news article by title analyzing with BN-LSTM network.** [C]  
2019 International Conference on Data Mining and Machine Learning (ICDMML 2019).
- **A Dynamic Network Traffic Classifier Using Supervised ML for a Docker-based SDN Network.** (Ongoing)
- PATENT : Docker-Based Cloud Application Automation Deployment** (Chinese Patent Application No. 2019112242339 )
- PATENT : A method of controller scheduling and service type allocation based on dynamic network flow** (ongoing)

## TECHNICAL(IT) SKILLS

**Programming/Scripting Languages:** Python, Java, Jsp, JS, HTML, CSS

**ML Framework:** Keras, Tensorflow, Scikit-learn

**Tools:** Pycharm, Android Studio, Selenium, Git, Maven

**Database Management:** MongoDB, MySQL

**Cloud-Based Technologies:** Docker

**OS System:** Linux, Windows

## LANGUAGES

English (Expert), Chinese (HSK-5), Bengali (Native), Hindi(Basic)

## RESEARCH INTEREST

Machine Learning, Natural Language Processing(NLP), Big Data, Software Defined Network (SDN)

## VOLUNTEER ACTIVITIES

Former vice-president of Fudan Dormitory Committee, Fudan University

Volunteered in the events organized by International Student organization, Fudan University

Member of ISU Academic Department, Shanghai Jiao Tong University