# VARUN AGARWAL

+91 9029512499 — varun.agrwl96@gmail.com — varunagrwl96.github.io — linkedin.com/in/varunagrwl96

# **EDUCATION**

Dwarkadas J. Sanghvi College of Engineering, University of Mumbai, India

2014 - 2018

B.E. in Information Technology – CGPA: 9.12/10.00

#### PROFESSIONAL EXPERIENCE

#### Software Engineer II, JPMorgan Chase & Co.

Jan 2020 - Present

Asset & Wealth Management, Mumbai, India

- Developed Java applications having micro-service architecture using Spring Boot & deployed on private cloud to reduce infrastructure costs by 70%. Implemented authentication, actuators, caching, load balancers, loggers & session management.
- Used multithreading to reduce the share allocation process time from more than 2 minutes to less than 15 seconds while ensuring transactions and rollback capabilities.
- Implemented Kafka for high-performance processing of trades.
- Subject Matter Expert at the Code For Good Hackathon for 120+ students for two consecutive years (2019 & 2020).

# Software Engineer I, JPMorgan Chase & Co.

Jul 2018 - Dec 2019

- Developed UI for thousands of trade advisors & Asset Class Leaders using React-Redux.
- Wrote SQL procedures & queries to flow trades into Bloomberg.
- Implemented the CI/CD pipeline (Jenkins & Jules) reducing deployment effort by more than 90%. Incorporated SonarQube & Black Duck scans as part of the pipeline.
- Followed proper agile practices including sprint planning, daily standup, backlog refinement, retrospective, etc.
- Awarded for developing a React Native solution for NGO 'Annadhan' in the Force for Good initiative over a period of 8 months.

### Android Developer Intern, Zaarvii Technologies

Dec 2016 - Jan 2017

 Developed android application for an IIT Bombay based startup with Google maps integration for their home automation solutions.

#### TECHNICAL SKILLS

- Languages: Java, Python, JavaScript, PHP, SQL, HTML, CSS, NoSQL, C++
- Technologies & Frameworks: Spring Boot, React, Redux, React-Native, Jupyter notebook

#### **PUBLICATIONS & PROJECTS**

# Twitter Analysis for Disaster Management:

IEEE Xplore

- Presented & awarded as Best Paper of the Session at ICCUBEA Conference 2018 (ISBN: 978-1-5386-5257-2)
- Developed an application for analyzing tweets to help government bodies & NGO's for rescue purposes during disasters.
- Leveraged NLTK for parsing tweets, tokenizing, stemming and Word2Vec for word vectors.
- Implemented Geo-Location feature that uses coordinates of tweets to plot dangerous & help-providing locations on a map.
- Ability to flag false rumors and provide statistics like death toll, number of people missing, etc.

#### Automated Aspect Extraction and Aspect Oriented Sentiment Analysis on Hotel Review Datasets

IEEE Xplore

- Presented research paper at ICCUBEA Conference 2018 (ISBN: 978-1-5386-5257-2)
- Extracted aspects dynamically using Stanford Dependency Parser and evaluated reviews based on those aspects.
- Used Word2Vec for word vectors, K-means clustering for correlated aspects & NLTK for tokenizing, stemming, etc.
- Performed sentiment analysis & used WordNet similarity to associate words to relevant aspects.

#### Chaakri: E-commerce application for NGO

- Developed an Android application to manage orders & distribution of goods for both B2B & B2C markets.
- Developed admin console using HTML, CSS, JavaScript, and Google charts for inventory management & sales analytics.
- Used Google Distance Matrix & other social media API's for finding the nearest middle-women & recognition of best performers.
- Awarded as the best project solution for the NGO 'SaNiSa' & Runner Up among 120+ students.

#### Farmer's Market

- Developed an Android application for famer's to sell crops directly to buyers with easy registration by scanning Aadhar Card ID.
- Introduced multilingual functionality to ease the use of application for less educated farmers.
- Used Recurrent Neural Network to predict the best suitable crop for farming based on the soil & weather conditions.

#### ACHIEVEMENTS AND EXTRA-CURRICULAR

•	Events Head, Association for Computing Machinery – Awarded with Best Student Chapter of all committees, DJSCE.	2015
•	Events Head, National Service Scheme - Volunteered 120+ hours organizing social events.	2015
•	Logistics Head, Computer Society of India – Awarded Best Active CSI Branch in whole India.	2016
•	Runner Up, JP Morgan's Code For Good Hackathon – Among 120+ students, Mumbai.	2017
•	Best Academics Award – Three consecutive 10/10 pointers (Semesters IV, V, VI).	2017
•	Runner Up, CodeShastra 3.0 – Among 220 participants from 16 top tier colleges, Mumbai (Round 0).	2017
•	AWS DeepRacer – Member of the only team in JPMC Mumbai to promote Machine Learning & its use cases in finance.	2019