Vaibhav Agrawal

SOFTWARE ENGINEER · MACHINE LEARNING · SEATTLE, WA

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Work Experience _____

SOFTWARE ENGINEER

Meta Bellevue, WA

Working on building resilient, scalable, and global scale monetization platform for Facebook

Twitch (Amazon)

Seattle, WA

SOFTWARE DEVELOPMENT ENGINEER II Mar. 2021 - Feb. 2024

- Led cross-team effort to launch dedicated seller of record in EU, resulting in annual cost savings of \$10 million through fee reduction
- Architected in-house recurring billing engine, reducing subscription management fees by up to 10%
- Promoted to SDE II within 1 year by leading async job migration, showcasing technical skills in system migration and re-architecture
- Introduced regression and component testing in critical payment paths that perform tests at scale and thus reduce toil and induce trust

New York University

New York, NY

SOFTWARE DEVELOPER | PART-TIME

Oct. 2019 - Dec. 2020

Feb. 2024 - Current

- · Built a REST-driven web application for a New York University tutoring program using Django, PostgreSQL and React
- Designed a dedicated algorithm to match students and tutors into individual and shared tutoring sessions

Salesforce San Francisco, CA

ASSOCIATE PRODUCT MANAGER INTERN

June. 2020 - Aug. 2020

- · Built a core release management tool on GUS to provide users a seamless agile experience in their production cycle
- · Worked directly with end-use customers to identify existing pain points while collaborating cross-functionally with engineering and UX teams

Education

New York University

New York, NY

M.S. IN COMPUTER SCIENCE (GPA: 3.85/4)

Sept. 2019 - Dec. 2020

• Algorithms, Database Systems, Big Data, Cloud Computing, Application Security, Deep Learning, Computer Networking, OS, Advanced Java

Indian Institute of Technology

Kharagpur, India

BACHELOR OF TECHNOLOGY (GPA: 9.03/10) | GOLD MEDALIST

July. 2015 - Aug. 2019

- · Holder of 2019 Anukul Chandra Sarkar Memorial Gold Medal for achieving highest GPA in the department
- · Algo & DS, Switching Circuits & Logic Design, Computer Architecture, OS, Parallel Programming, Probability & Statistics, ML, NLP, Al

Skills

Programming Golang, Python, C++, Java

Full Stack Tools AWS, Docker, Terraform, gRPC, GraphQL, Jenkins, Bash, REST, Django, React.js, Swift(iOS), Android

Databases PostgreSQL, RDS, DynamoDB, MongoDB, MySQL

ML & Big Data MapReduce, Spark, Kafka, ElasticSearch, Kibana, Scikit-learn, Pandas, Pytorch, Tensorflow, NLTK, Scala, R

Projects & Publications

Designing Microservices on AWS

New York, NY

CLOUD COMPUTING, DEPARTMENT OF COMPUTER SCIENCE (NYU)

Spring. 2020

· Built server-less web apps for smart door authentication, email spam filtering and NLP powered photo search using various AWS tools

Twitter Bot Detection New York, NY

BIG DATA, DEPARTMENT OF COMPUTER SCIENCE (NYU)

Spring. 2020

• Built a big data ML model to identify Twitter bots spreading election propaganda with an accuracy of 91% using SparkML, MongoDB and Kafka

Journal of the Eastern Asia Society for Transportation Studies (EASTS)

Japan

AUTHOR OF: "CRASH SEVERITY ANALYSIS THROUGH NONPARAMETRIC MACHINE LEARNING METHODS" (CITED BY 9)

Dec. 2019

• Explored three ML algorithms to identify critical factors affecting severity of accidents and achieved the best accuracy of 90% with XGBoost

Computational Sanskrit & Digital Humanities (17th World Sanskrit Conference)

Vancouver, Canada

AUTHOR OF: "IMPROVING THE LEARNABILITY OF CLASSIFIERS FOR SANSKRIT OCR CORRECTIONS" (CITED BY 7)

July. 2018

- · Improve the accuracy of word corrections up by 10% by introducing semantic language constraints of the Sanskrit grammar
- Further demonstrated different machine learning approaches like attention models and achieved the best F-score of 93.72 with LSTM