Vaibhav Agrawal

SOFTWARE ENGINEER · MACHINE LEARNING · SEATTLE, WA

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Work Experience _____

SOFTWARE ENGINEER

Meta Bellevue, WA

Will be joining as SWE in the monetization org of 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

 $\bullet \ \, \text{Built server-less web apps for smart door authentication, email spam filtering and NLP powered photo search using various AWS tools}$

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

 $Author\,of: "\underline{IMPROVING\, THE\, LEARNABILITY\, OF\, CLASSIFIERS\, FOR\, \underline{SANSKRIT\, OCR\, corrections}"\, (\underline{CITED\, BY\, 7})$

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