Vaibhav Agrawal

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Education

New York University *Sep 2019 – Dec 2020*
MS in Computer Science (GPA: 3.85/4.0)

Indian Institute of Technology Kharagpur *Jul 2015 – Apr 2019*
Bachelor of Technology (GPA: 9.03/10.0), **Gold Medalist**

Experience

Facebook *Mar 2025 – Present*
Software Engineer E4 *Bellevue, WA*

- Designed scalable systems for Facebook's monetization signal growth team, ensuring high performance
- Collaborated on key strategic initiatives, resulting in enhanced platform revenue and increased user engagement
- Engineered technical solutions to optimize Meta's platform monetization strategies and performance metrics

Amazon (Twitch.tv) *Mar 2021 – Feb 2025*
Software Engineer II *Seattle, WA*

- Led cross-functional team launch of a dedicated EU sales entity (SOR), yielding $12M annual forex savings
- Developed an in-house system to manage recurring billing, cutting subscription management costs by up to 10%
- Introduced E2E testing (regression component) for key payment processes, reducing bug-induced incidents by 85%
- Standardized async job architecture, driving team-wide adoption and fast-tracking promotion to SWE II in 1y
- Boosted web checkout conversion rates by 2% in the US by integrating Venmo as a payment method on Twitch

Salesforce *Jun 2020 – Aug 2020*
Associate Product Manager Intern *San Francisco, CA*

- Launched a centralized release calendar on Salesforce's GUS platform to consolidate fragmented release schedules
- Partnered with cross-functional teams to create a unified source for release planning, enhancing coordination

Expertise

Over 10K lines: Go (*Concurrent Microservices*), Python (*Backend, ML*), C++ (*Performance*)

Infra Tools: AWS, Kubernetes, Docker, Postgres, GraphQL

ML Tools: Pandas, PyTorch, NLTK, TensorFlow, Sagemaker

Projects

Error Detection Framework for Sanskrit OCR Documents *github.com/avaibh/aksharAI*

- Developed error detection classifiers for Sanskrit documents after Optical Character Recognition (OCR) using a novel framework combining synthesized dictionaries, error confusion patterns, and domain-specific vocabularies
- Tools Used: Python, Scikit Learn, TensorFlow

Twitter Bot Detection *github.com/avaibh/birdbot*

- Built a big data machine learning model with 91% accuracy for detecting political propaganda bots on Twitter
- Tools Used: Spark ML, Kafka, MongoDB

Sanskrit Language Learning Android App *github.com/avaibh/SansTranslate*

- Created an interactive Sanskrit learning app featuring vocabulary lists, pronunciation guides, quizzes, and viz aids
- Tools Used: Java, XML, Android

More projects available at avaibh.github.io

Publications

- **Vaibhav Agrawal** et al. Crash severity analysis through nonparametric machine learning methods Journal of East Asia Society of Transportation Studies 2019 Volume 13 Pages 2614–2629. (Cited By 9)
- D Adiga, R Saluja, **Vaibhav Agrawal** et al. Improving the learnability of classifiers for sanskrit ocr corrections Computational Sanskrit & Digital Humanities 2018 Pages 143–161. (Cited By 7)