# Abhinav Sharma

Staff Machine Learning Engineer

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## **WORK EXPERIENCE**

# **Staff Machine Learning Engineer** Docusign

09/2022 - Present Seattle, WA

- Key developer in the launch of <u>Docusign Intelligent Agreement Management (IAM) in May 2024</u>. Led the development of the ingestion and reprocessing pipelines for 30M+ documents for AI processing. Implemented doc versioning, processing and storage layers to allow for normalized schema-less storage of metadata.
- Led architecture of <u>Docusign Al Labs</u>, an early prototype of Docusign IAM - to incubate and validate the IAM vision with early customers.
   Developed key scenarios for agreement summary, extractions, clause explain, QnA to prove out product market fit.
- Key developer on QnA Chat with Data system utilizing a RAG based architecture, allowing customers to reason over their agreement corpus. Architected several features including vector search, multiturn chat, citations, feedback etc.
- Led the development of an inference microservice to host custom models, allowing for capabilities such as multimodel serving, rollback and canary rollout, fractional GPU usage, inference chaining. Enabled key stakeholders to deploy models in < 1 week (200% ↓).</li>
- Founding member of the AI team at Docusign. Led several key initiatives and oversaw team growth from 20 to 100 members. Interviewed 100+ candidates, mentored 5 candidates over 2 years. Established several eng. best practices for safe development.

# Senior Software Engineer

Microsoft Azure Al Search

06/2018 - 08/2022 Redmond, WA

- Led architecture for scalable near real-time emergency zero-touch secret rotation for a fleet of 70k+ VMs. Improved security posture for a service spanning 30+ Geos without downtime.
- Worked on several critical initiatives pertaining to the \$10B Pentagon JEDI project – regional billing migration, telemetry obfuscation, zero touch service buildout, Devops tooling improvements, setting up scalable alerting infrastructure.
- Received promotions twice on the team and interviewed / mentored several incoming members to onboard to the service.

### **Software Engineer**

Microsoft Azure Networking

03/2016 - 05/2018 Redmond, WA

 Developed a scalable framework for deploying and monitoring continuous e2e integration tests to validate early features for Azure Networking. Caught several potential large-scale outages in low traffic regions. The service is now used by over 100 teams for feature validation and outage detection across 50 regions.

## **SKILLS**



# **INTERNSHIPS / PROJECTS**

Microsoft SWE Intern (05/2015 - 08/2015)

- Designed a web app to triage, prioritize and troubleshoot networking issues across different SKUs of routers and switches
- Automated software upgrades and diagnostic reporting on networking hardware in Azure

#### Data Science Projects (01/2020 - 05/2024)

- Facial Keypoints Detection (Kaggle Top 50)
- Bird call Classification using Transfer Learning
- Airline Delay Classification (Using PySpark on 30M Datapoints)
- Shapsum: A framework to Predict Text Summarization Quality
- Influence Maximization with Fairness at Scale

#### Teaching Assistant

- Python Based Data Analytics Columbia Engineering
- Service Operations Management Columbia Business School

### **EDUCATION**

# M.S. Information and Data Science University of California, Berkeley

01/2020 - 05/2024 GPA: 4.0

## M.S. Management Science and Engineering Columbia University

06/2014 - 05/2016 GPA: 3.8 New York, NY

Berkeley, CA

# **B.S. Computer Science and Engineering** Manipal University, India

07/2010 - 06/2014 Manipal, India

### **INTERESTS**

Chess | Airplane Crashes | Personal Finance | Music