

Sukanya Saha

MS student at CU Boulder • CSRMP Apprentice at Google • Ex Software Engineer at HSBC

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Work experience

Google - Computer Science Research Mentorship Program Apprentice: Sep 2021 - Jan

2022

- Received mentorship from a Googler to pursue computing research on bias aware and privacy-preserving machine learning
- Worked on Virtual stylist that lets you try clothes online using generative models and computer vision

Skillset (Proficient)

Programming languages

Python

ML libraries

numpy **scikit-learn**

matplotlib **pandas**

plotly **PyTorch**

TensorFlow **Keras**

Computer Vision libraries

OpenCV

NLP libraries

spaCy **Gensim**

NLTK

Web automation tools

Beautiful Soup

Selenium

Web frameworks

Flask

Databases

MySQL **BigQuery**

MongoDB

MS SQL Server

Tools

Git **Jupyter notebook**

GCP

Skillset (Intermediate)

Programming languages

Golang **Scala** **C**

JavaScript **Java**

Web technologies

gRPC **REST** **React**

HTML **CSS**

Tools

Webot **DialogFlow**

University of Colorado Boulder - Teaching Assistant: Jan 2021 - Present

- Teach students Principles of Programming Languages to the class of 270 undergraduate students

HSBC, India — Software Engineer - Data: Mar 2019 - Dec 2020

- Outperformed existing click through rate which is proportional to revenue generation by 5% on **personalized advertisement by digital customer segmentation** model using unsupervised machine learning
- Developed a web application using topic modeling with customers' preferences and sentiments to **compare mobile banking apps** that helped to prioritize feature development, bug fixing, choose criteria for A/B testing
- Engineered a web-based **FAQs Chabot** using Natural Language Processing that reduced inbound call by 10% thereby decreased customer service cost
- **Forecasted customer attrition** with 81% accuracy that decreased customer churn and stopped the loss of revenue

Cognizant, India — Software Engineer: Aug 2016 - Feb 2019

- Automated **Resume Screening** process using OCR to decrease average shortlisting time from 1 week to 2 days
- Expedited **customer onboarding process** using Text Summarization reducing manual effort by 50%
- Architected **Server Failure Prediction model** on a network using anomaly detection to enhance fault tolerance

Education

University of Colorado Boulder, US - MS in Computer Science: Jan 2021 - Dec 2022

- E-Commerce application with distributed backend services using Python, Flask, JavaScript, gRPC, RAFT Protocol, Atomic broadcast, and Google Cloud Platform
- Enhancing Privacy in Federated machine learning using differential privacy

Awards, Extra-Curricular and Certification

- Ranked 65th in Indian Engineering Olympiad
- Conducted STEM-ed training for differently-abled children in the Indian Institute of Mother and Child NGO
- Certification on Deep Learning and Generative Adversarial Networks Specialization by deeplearning.ai