

# Sukanya Saha

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

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## Work experience

**Google, USA - Computer Science Research Mentorship Program Apprentice:** Sep 2021 - Jan 2022

- Receiving mentorship from a Googler to pursue computing research on bias aware and privacy-preserving machine learning
- Personalized stylish recommender bot using natural language processing, generative models, and computer vision

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

- Improved click through rate by 5% of personalised advertisement by building digital customer segmentation model using unsupervised machine learning
- Built a model to predict credit card utilization to generate offers
- Developed a web application using topic modeling with customers' preferences and sentiments to compare mobile banking apps
- Achieved 91% accuracy on customer return to purchase ML model with efficient data collection
- Developed a web-based FAQs Chatbot using Natural Language Processing
- Gained 81% accuracy on customer attrition ML model with high dimensional data to decrease customer churn

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

- Increased Recall by 5% on customer re-purchase predictive model for Marketing Analytics team
- Built Resume Screening application using OCR to decrease average screening time from 1 week to 2 days
- Streamlined and simplified high volume customers' onboard validation process using Text Summarization
- Developed CCTV surveillance in ATMs using convolution neural network and activity recognition to reduce fraud
- Built 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

## 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**