| Sukanya Saha | horizontal line  **MS student at CU Boulder | Ex Machine Learning Engineer at HSBC | Research Apprentice at Google**  720-757-2958  sukanyasaha007@gmail.com  [LinkedIn](https://www.linkedin.com/in/sukanyasaha007) [github](https://github.com/sukanyasaha007)  Software engineer with experience in building end-to-end highly scalable and robust applications with distributed architecture and highly skilled in statistical models, deep learning, natural language processing, and computer vision |
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| **ㅡ** Skills | horizontal line  Programming languages: Python, Golang, Javascript, Scala  ML Stack: Statistical Machine Learning, Deep Learning algorithms, Generative models, Reinforcement learning, Computer Vision, Robotics  ML libraries / frameworks: Tensorflow, openCV, Pytorch, Maplotlib, scikit-learn, ROS  Tools: Git, Webot, Jupyter notebooks  Web Technologies: REST, gRPC, HTML, CSS, MySQL |
| **ㅡ** Education **ㅡ** Experience | horizontal line University of Colorado Boulder, Boulder— MS in Computer Science: GPA 3.85 Jan, 2021 - expected in Dec, 2022  **Coursework -** Distributed Systems, Natural Language Processing, Computer Vision, Advanced Robotics  **Research work:**  **Reinforcement Learning**, **Generative Adversarial Networks** and Robotics. Currently **working on human-inspired robot learning** using generative models and reinforcement learning  **Projects:**  **E-Commerce application** with **distributed backend services** using Python, **gRPC**, RAFT Protocol, Atomic broadcast and Google Cloud Platform. **Enhancing Privacy** in Federated machine learning using differential privacy  Teaching assistant work:  **Teach students Principles of Programming Languages** to the class of 270 undergraduate students. Help students to **debug Scala and Python** codes and brainstorm project ideas  horizontal line Google Computer Science Research Mentorship Program Scholar, USA — Apprenticeship September 2021 - Present   * Receiving mentorship from a Googler to pursue computing research on bias aware and privacy-preserving machine learning |
| **ㅡ** Experience | horizontal line Teaching Assistant, University of Colorado at Boulder : Jan, 2021 - Current  * Deliver recitation on functional programming, lambda functions etc. to a class of 300 undergrad students, debug code and brainstorm project ideas for class   **Machine Learning Engineer, HSBC : Mar, 2019 - Dec, 2020**   * Designed and developed a **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** * Acheived **91% accuracy** on customer return to purchase ML model with efficient data collection * Developed a web-based **FAQs Chabot** using **Natural Language Processing** * Gained **81% accuracy** on customer attrition ML model with high dimensional data to decrease customer churn  Data Scientist, Cognizant Technology Solutions : August, 2016 - Feb, 2019  * Increased **Recall by 5%** on customer repurchase **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 |
| **ㅡ** Awards and Extra- Curricular | horizontal line   * Awarded **“Above and Beyond”** in **Cognizant** * Ranked **65th** in **Indian Engineering Olympiad** * Academic excellence award, Future Institute of Engineering and Management * Conducted seminar on applications machine learning in association with the Computer Society of India * Conducted training sessions for differently-abled children in the **Indian Institute of Mother and Child NGO** * Influenced young children for **STEM** education with **Adore India NGO** |
| **ㅡ** Certifications | horizontal line   * Coursera **Machine Learning** by Stanford University * **Deep Learning Specialization** by deeplearning.ai * **Generative Adversarial Networks** Specialization by deeplearning.ai * **Reinforcement Learning Specialization** by University of Alberta & Alberta Machine Intelligence Institute |