

# AKSHAY SHARMA

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## EDUCATION

### Columbia University

MS in Computer Science, Natural Language Processing Track

Courses: Reinforcement Learning, Deep Learning for Computer Vision, Natural Language Processing

New York, NY

Expected Dec 2022

### Indian Institute of Technology (BHU)

Dual Degree in Mathematics and Computing, CPI: 9.03/10.0

Courses: Optimization Techniques, Digital Image Processing, Machine Translation

Varanasi, IN

May 2021

## WORK EXPERIENCE

### Rejoy Health

Product Manager

- Developed product strategy for the YC backed startup's apps (Android, IOS and MacOS)
- Launched 3 new features in 6 months, resulting in a 30% MoM growth in user engagement

Remote

Jan 2021 - Jul 2021

### Goldman Sachs

Summer Analyst

- Developed a micro-services health check backend using Prometheus and Apache Kafka
- Created analytics platform in React.JS and Spring for Consumer and Asset Management Division

Bengaluru, IN

May 2020 - Jun 2020

### Adobe

Product Intern

- Created Hand-drawn Sketch Classification with context information using Google Sketch RNN
- Fetches user's art journey utilizing Adobe Spark and developed a Photoshop plugin in React JS to summarize it to a blog

Noida, IN

May 2019 - Jul 2019

## SKILLS & INTERESTS

PyTorch, Tensorflow-Lite, Flutter, React Native, MERN Stack, AWS, Apache Kafka, Spark, Julia

Organized inter-college competitions and guest lectures as the Campus Lead, Google Developer Student Club

Led workshops and hackathons as Joint Secretary of Club of Programmers, IIT Varanasi

## ENGINEERING PROJECTS

### Google Summer of Code 2020

- Designed DiffOpt.jl, a differentiable convex optimization programming package in Julia

Jul 2020 - Sep 2020

### Research Intern, Indian Statistical Institute, Delhi Center

- Collaborated with research team of Prof S. K. Neogy to improve a confidence-weighted algorithm for online, large-scale classification task on the common crawl dataset by 10%

Dec 2019

### Google Summer of Code 2018

- Designed and built a Native C++/Android SDK for real-time object detection and pose estimation on smartphones with Prof. Fabien Spindler at Team Rainbow, INRIA

May 2018 - Aug 2018

## ACADEMIC PROJECTS

### Scalable Clustering of Lines - Thesis

- Introduce a scalable algorithm for clustering lines and affine subspaces of fixed dimensions via data reduction leveraging a coresets approximating scheme

### KKT Conditions for Interval Optimization - UG Project II

- Defined the notion of gH differentiability for Interval Optimization and built a Python package for programs with a deterministic interval objective function

### Discounted Stochastic Games and Applications - UG Project I

- Volunteered for implementing a markov perfect game in AMPL and conducted sensitivity analysis of the constraints
- Wrote the article: Ghosh, D., Sharma, A., Shukla, K.K. et al. Globalized robust Markov perfect equilibrium for discounted stochastic games and its application on intrusion detection in wireless sensor networks: JJIAM, 37, 283–308 (2020)