Gautam Mittal

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EDUCATION

UC BERKELEY
B.S. Electrical Engineering & Computer Science (EECS)
Expected May 2022 | Berkeley, CA
GPA: 3.8 / 4.0
Regents' and Chancellor's Scholar
Accel Scholar
Kleiner Perkins Engineering Fellow
Eta Kappa Nu (EECS Honor Society)
Cal Hacks, UC Jazz, Statistics Undergraduate Student Association

SKILLS

LANGUAGES
Python • JavaScript • Swift • Java • C
SQL • Scheme • Ruby • RISC-V • Objective-C

TOOLS
PyTorch • JAX/Flax • TensorFlow
Numpy • Node.js • Flask • Rails • HTML
CSS • React • Processing • AWS • GCP
UNIX • Git

LINKS

GitHub: github.com/gmittal
LinkedIn: linkedin.com/in/mittalgautam
Website: gautammittal.com

COURSEWORK

UNDERGRADUATE
CS61A: Structure & Interpretation of Computer Programs
CS61B: Data Structures
CS61C: Machine Structures
CS70: Discrete Mathematics & Probability
CS170: Efficient Algorithms & Intractable Problems
CS162: Operating Systems (Fall 2020)
CS186: Database Systems (Fall 2020)
CS188: Artificial Intelligence
EECS16A: Linear Algebra, Circuits, & Systems I
EECS16B: Differential Equations, Devices, & Systems II
EECS126: Probability & Random Processes
MATH53: Multivariable Calculus

EXPERIENCE

GOOGLE | Software Engineering Intern, Google Brain
May 2020 – Present | Remote

- Researching controllable generative models for music composition with Magenta, a research group exploring the role of ML in the creative process

RISELAB, UC BERKELEY | Undergraduate Researcher
September 2019 – Present | Berkeley, CA

- Researching deep reinforcement learning and unsupervised learning for database systems with Zongheng Yang under Professor Ion Stoica
- Presented modular research platform for designing learned database query optimizers with deep RL at RISE Retreat (January 2020)

STRIPE | Software Engineering Intern
May 2019 – August 2019 | San Francisco, CA

- Built an end-to-end data export pipeline for Connect, used daily by Lyft, DoorDash, and others to process millions of financial objects
- Refactored export infrastructure to use a concurrent GraphQL resolver to enable API-consistent data, faster exports, and increased security
- Designed and tested data infrastructure using Ruby, Elasticsearch, & MongoDB; worked on Dashboard front-end with React
- Coordinated UX research study to understand user needs and adjusted engineering & product roadmap accordingly

EDMODO | Machine Learning Intern
June 2017 – August 2017 | San Mateo, CA

- Designed deep learning models and data pipelines with Python, TensorFlow, and Elasticsearch for question recommendation on the world's largest educational social network (100M+ users)

PROJECTS

FEVERBASE | Founding Engineer | feverbase.org
March 2020 – July 2020 | Python, Flask, MongoDB

- An open platform for COVID-related clinical trial data connecting researchers, patients, and the public to relevant information for drug discovery and trial participation; Source code: github.com/feverbase

COPILOT | Executive Director
June 2016 – June 2018 | JavaScript, Node.js, Firebase

- Designed and implemented an online, anonymous peer-to-peer mental health counseling platform; Source code: github.com/projectcopilot

AWARDS

2020 Contrary Talent Fellow (inaugural cohort)
2019 IEEE Eta Kappa Nu Member (top 25% of Berkeley EECS)
2019 Accel Scholar (run by Accel Partners & Berkeley EECS)
2019 Kleiner Perkins Engineering Fellow
2018 Regents' and Chancellor's Scholarship (top 2% of incoming class)
2018 US Marine Corps & Louis Armstrong Jazz Awards
2016 MIT Zero Robotics Challenge International Finalist
2015 Top 10 at MHacks, PennApps (international hackathons)
2015 Apple WWDC Scholarship