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 energy-based generative models for music generation with Magenta, a research group exploring ML in the creative process
- Designed new methods for sampling from MusicVAE and enforcing long-term structure with JAX/Flax models

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

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