Rebecca Dang

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EDUCATION

University of California, Berkeley

Berkeley, CA

M.S. Electrical Engineering and Computer Science (EECS)

Aug 2025 - May 2026

- Research focus: CS education, advised by Professors Lisa Yan and Michael Ball
- Notable coursework: User Interface Design & Development, CS Education at Scale, Data Mining

University of California, Berkeley

Berkeley, CA

B.S. Electrical Engineering and Computer Science (EECS), 3.9 GPA, Graduated with honors Aug 2021 - May 2025

- Notable coursework: Operating Systems, Computer Networks, Building User-Centered Programming Tools, Computational Photography & Computer Vision, Research in AI Education, Computational Genomics, Machine Learning, Databases, Artificial Intelligence, Linux System Administration, Efficient Algorithms & Intractable Problems, Computer Security
- Member of IEEE-HKN (Eta Kappa Nu), Mu Chapter (EECS Honor Society)

Teaching

UC Berkeley | Head Graduate Student Instructor, DATA 188 | Berkeley, CA Jan 2026 - May 2026

• Teaching DATA 188: Introduction to Deep Learning

UC Berkeley | Graduate Student Instructor, DATA C88C | Berkeley, CA Aug 2025 - Dec 2025

• Organized course logistics and accommodations for 500+ students, managed other staff members, taught 2 weekly lab sections, held office hours, and wrote exam questions for <u>DATA C88C</u>: Computational Structures in Data Science (aka CS 88)

UC Berkeley | Head Teaching Assistant, DATA C88C | Berkeley, CA

Jan 2025 – May 2025

• Presented guest lecture on <u>Inheritance</u>

UC Berkeley | Head Teaching Assistant, DATA 101 | Berkeley, CA

Aug 2024 – Dec 2024

- Created and updated <u>project</u> and homework assignments, taught 2 weekly discussion sections, held office hours, answered student questions on online course forum, and graded exams for <u>DATA 101</u>: Data Engineering
- Co-created a new project, Project 0: SQL Review with Professor Michael Ball

UC Berkeley | Head Teaching Assistant, DATA C88C | Berkeley, CA

Jan 2024 – May 2024

• Presented guest lecture on <u>Linked Lists</u>

UC Berkeley | Teaching Assistant, DATA C88C | Berkeley, CA

Aug 2023 – Dec 2023

UC Berkeley | Tutor, DATA C88C | Berkeley, CA

Aug 2023 – Dec 2023

RESEARCH, PUBLICATIONS, & TALKS

JupyterCon 2025 | Speaker | San Diego, CA

Nov 2025

- Presented lightning talk: Teaching Data Engineering at Scale With Jupyter Notebooks at UC Berkeley
- Featured on UC Berkeley CDSS news

ASEE LEES 2025 | Paper | Montreal, Quebec, Canada

Jun 2025

• Abigail Brooks-Ramirez, Rebecca Dang, Bryan Adolfo Ventura Benitez, and Lisa Yan. 2025. Scaling Responsible Data Science Education: The Role of a Teaching Assistant in Bridging the Sociotechnical Divide. In Proceedings of the 2025 ASEE Annual Conference. American Society for Engineering Education, Montreal, Quebec, Canada. http://doi.org/10.18260/1-2-57629

SIGCSE TS 2025 | Poster | Pittsburgh, PA

Feb 2025

• Krina Patel, Abigail Brooks-Ramirez, Rebecca Dang, Bryan Adolfo Ventura Benitez, and Lisa Yan. 2025. Exploration of Undergraduate Teaching Assistant Identity and Teaching Goals in Data Science Courses. In Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 2 (SIGCSETS 2025). Association for Computing Machinery, New York, NY, USA, 1573–1574. https://doi.org/10.1145/3641555.3705179

UC Berkeley | Research Assistant | Berkeley, CA

Sep 2023 – Dec 2023

• Leveraged AI techniques to model and predict health outcomes resulting from extreme weather events due to climate change. Research mentor: Professor Irene Chen, Computational Healthcare for Equity and iNclusion Lab

Assignment Snapshots

Jan 2025 - Present

- Creating a web application to help TAs give students qualitative code feedback based on their OkPy backups
- 5th Year M.S. EECS project, advised by Professors Lisa Yan and Michael Ball

We Have Spotify at Home

Aug 2025 - Dec 2025

- Co-created a new project with Abigail Brooks-Ramirez for CS 61A or DATA C88C called We Have Spotify at Home where students implement a full stack web application similar to Spotify's Daylist feature (a daily customized music playlist), thereby learning modern software engineering skills and frameworks (including a GenAI component) in the process
- Advised by Professors Lisa Yan and Michael Ball in CS 294-189: Designing CS Education at Scale

Berkeley CDSS Common Docs

Mar 2025 - Present

• Documenting common processes and tools used by EECS/CS/DS TAs at UC Berkeley

findprob

Aug 2024 - Dec 2024

- Created a command-line interface called <u>findprob</u> that uses LLMs to automatically classify large problem banks by topic, saving time for TAs and potentially <u>helping</u> students find problems to study
- Advised by Professors Gireeja Ranade and Narges Norouzi in CS 194-271: Research in AI Education

Berkeley Class Site

Jun 2024

• Created web accessibility continuous integration workflows for the <u>Berkeley Class Site template</u>, ensuring students with disabilities can access course materials

Computer Science Mentors | Course Coordinator | Berkeley, CA

Dec 2022 - Dec 2023

 Managed 30+ weekly tutoring sections, hosted exam review sessions, reviewed weekly teaching materials (worksheets and slideshows), and interviewed candidate mentors to support students taking DATA C88C

Industry Experience

Databricks | Software Engineer Intern | Mountain View, CA

May 2025 – Aug 2025

- Implemented an extensible and configurable system to automatically remediate failed continuous integration (CI) jobs, saving 120+ engineer hours/month
- Migrated source of truth for CI checker results from GitHub to an internal RPC service, reducing Databricks' dependency on 3rd party APIs and halving request latency

Stripe | Software Engineer Intern | South San Francisco, CA

May 2024 – Aug 2024

- Saved 38+ engineer hours weekly by creating a heuristic to prioritize tests run in continuous integration builds for the largest Ruby codebase in the world (20+ million lines of code and 3+ million tests)
- Created dashboard to evaluate effectiveness of different test ordering heuristics

Bloomberg | Software Engineer Intern | New York, NY

May 2023 – Aug 2023

- Created an internal Node.js package which retrieves data from GraphQL APIs to aid in migration of Bloomberg's <u>Customer Service Center</u> (CSC) portal to new infrastructure
- Created full stack web subapp for clients to submit and view Bloomberg Valuation (BVAL) Price Challenge tickets in the CSC portal using TypeScript, React, and Express.js
- Reduced maintenance costs by creating the first CSC subapp that uses Bloomberg's internal managed infrastructure and significantly reduced back-and-forth between customer service representatives and clients by adding advanced input validation

Bloomberg | Software Engineer Intern | New York, NY

May 2022 – Aug 2022

• Integrated a new authorization service, <u>Bloomberg Law</u>'s (BLAW) Draft Analyzer API, and the core BLAW Ruby on Rails codebase, speeding up BLAW engineers' development process by eliminating the need for apps to go through the core BLAW codebase to check if a user is authorized to hit a certain API endpoint

Awards

• Outstanding Graduate Student Instructor Award (May 2025)

SKILLS

Programming Languages: Python, Java, Ruby, TypeScript, JavaScript, Golang, Scala, SQL, C, Scheme Technologies: Git, GitHub, NumPy, Pandas, React, HTML, CSS, Ruby on Rails, MongoDB, GraphQL, Node.js, Express, Jest, JUnit, Pytest, OpenAPI (Swagger), continuous integration, Caddy, Redis, Jenkins

Other: Technical documentation, Jira, Agile, Computer Science Education