DAVID OUYANG MOENCH

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Skills: jupyter, applied math, UNIX, bash, git, vim, python, javascript, react, ruby/rails, golang, AWS, postgreSQL, redis, kubernetes, docker, gatsby, graphQL, d3, webGL, web audio api
Github: https://github.com/domoench
Site: https://davidmoench.com

EXPERIENCE

[06/2022 – 09/2022] **Graduate Research Assistant. *RESET Lab at UT Austin*** – Remote
- Developed and validated vehicle energy requirement models with UT professor Sergio Castellanos as part of RESET lab's ongoing research into transit bus fleet electrification in Mexico City.
- Tools: Jupyter, NREL's FASTSim, python, numpy, pandas

[05/2019 – Present] **Senior Software Engineer. *Kickstarter*** – NYC
- Worked on the payments team leading full stack technical projects from compliance with regulatory changes like KYC and SCA to frontline support remediating mission-critical incidents.
- Tools: react, ruby/rails, sorbet, typescript, MySQL.

[02/2019 – 05/2019] **Freelance Fullstack Software Engineer. *Joro*** – Remote
- Worked on the early-stage architecture and implementation of Joro's mobile apps. Designed and implemented the carbon offset subscription backend. Other miscellaneous full stack and devops responsibilities: Automating the CI and deployment pipeline, API design, DB migrations, website maintenance.
- Tools: react / react native, stripe / plaid, AWS, CircleCI.

[1/2015 – 3/2017] **Software Engineer**. ***Datadog –*** NYC
- Contributed to all levels of the application stack, from streaming metrics ingestion (millions of data points per second), backend service scaling, and DB migrations, to frontend real-time d3 graph visualizations and UI features. Implemented the metric metadata system, used for displaying units in visualizations. Member of the ops 24/7 on-call rotation. Conducted engineering interviews.
- Tools: golang, python, javascript, postgres, redis, consul, AWS, linux, looker, pagerduty.

[3/2017 – 1/2019] ***Blubox –*** Baltimore, MD
- Designed and built a tiny house out of structural insulated panels. https://blubox.house.

[2014] **Research Assistant. *UT Austin Computational Visualization Center –*** Austin, TX
- Obtained funding, conducted research, and implemented a software tool with Python and Matplotlib for use by neuroscience researchers to visualize neuronal connetomics data acquired through fMRI.

EDUCATION

[2021 – 2023] (ongoing) **M.S. in Applied and Computational Math. *Johns Hopkins University.***
[2012 – 2014] **B.S. in Comp Sci*. University Of Texas at Austin.*** GPA: 3.9. Phi Beta Kappa.
[2005 – 2009] **B.A in Music. *Wesleyan University***. Graduated with honors.

MISC

Volunteering: Girls Who Code teacher at Urban Assembly Unison School in Brooklyn. Fall 2017.
Interests and Hobbies: Music composition, design + construction, guitar, sustainability, journalism
Language: Elementary Chinese