Kye Burchard

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EDUCATION

MIT | SB Electrical Engineering and Computer Science   2017 - 2021
GPA: 5.0

EXPERIENCE

Stripe | Senior Software Engineer (L3, API Services)   Jan. 2023 -
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Stripe | Software Engineer (L2, Dashboard Platform)   Jan. 2022 - Dec. 2022
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  - Maintained a high quality bar for the Stripe Dashboard
  - Mentored 2 new grads and an intern in career growth &

Stripe | Software Engineer (L1, Dashboard Platform)   Feb. 2021 - Dec 2021
  - Built platformized infrastructure to improve performance, reliability, and security of the Stripe dashboard, a massive React/Ruby web app

web.lab | Operations Chair   Jan. 2020
  - Coordinated logistics, staff, and delivered lectures for 200+ person web development course

HackMIT | Logistics Head 2019, Dev & Corporate Relations 2018   April 2018 – Sept. 2019
  - Headed up 12-person logistics team to plan and execute MIT's largest hackathon

Other
  - **Stripe Internship** Improved the performance of the highest-traffic page by 2-3x
  - **MIT Media Lab** Designed algorithm and data pipeline to improve location detection for Rhythm Badges
  - **Microsoft Garage** Designed & implemented a modular, scalable audit logging architecture as intern
  - **Maseeh Hall** Led largest dorm at MIT in reviving culture, resulting in a 20% improvement in retention
  - **SIPB** Keyholder at MIT's student computing group

PROJECTS

Overcooked FPGA | SystemVerilog, C++, Python   github.com/kyeb/overcooked-fpga
An online-multiplayer implementation of the game Overcooked, implemented entirely in hardware.
Designed & implemented protocol to synchronize game state between FPGAs over the internet in real time.

Politichat | React, Express, socket.io, Jitsi   politi.chat
Startup helping campaigns in the age of COVID-19 with a replacement for 1-on-1 conversations with
candidates. Project for CS91r at Harvard.

COURSEWORK

Fall 2020	6.111 Digital Systems Lab, 6.837 Graphics, 6.S081 Operating Systems, 6.S079 Quantum Circuits
Spring 2020	6.858 Computer Security, 18.05 Probability & Statistics, CS91r Political Tech (Harvard)
Fall 2019	6.172 Performance Engineering, 6.034 Artificial Intellligence, 18.06 Linear Algebra
Spring 2019	6.033 Computer Systems Engineering, 6.002 Circuits, 6.036 Machine Learning

SKILLS

ADVANCED	Python, Ruby, Java, TypeScript, Linux, C, HTML/CSS, gRPC/Protobuf
KNOWLEDGEABLE	Terraform, C++, C#, LaTeX
EXPLORING	Rust, SystemVerilog