

BRANDON CANFIELD

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<https://brandoncanfield.coffee/>

EDUCATION

Yale University

New Haven, CT

B.A. in Computing and the Arts (music)

Aug. 2017 - May 2021

Computer Science GPA: 3.96/4.0, Overall GPA: 3.83/4.0

Relevant Courses: The Hardware/Software Interface, Compilers and Interpreters, Intensive Algorithms, Computer Graphics, Human-Computer Interaction, Systems Programming, Parallel Programming Techniques, Data Structures, Algorithmic Composition, Sound Synthesis, Music Technology, Linear Algebra, Vector Calculus

WORK EXPERIENCE

Jane Street Capital

New York, NY (*remote*)

Quant Trading Intern

June 2020 - present

- Analyzed historical data to build financial models

Yale Computer Science Department

New Haven, CT

Undergraduate Learning Assistant

Sep. 2018 - May 2020

- Served as teaching assistant for undergraduate/graduate parallel programming and systems programming courses
- Hosted biweekly office hours to debug code and answer student questions about parallel programming, OpenMP, MPI, CUDA, and C
- Graded student coding assignments

Carnegie Mellon School of Computer Science

Pittsburgh, PA

Research Assistant

May 2019 - Aug. 2019

- Designed and implemented system for preserving user privacy while sharing mobile programming-by-demonstration scripts
- Built Node.js and PostgreSQL server to store and process hashed data from client app on phones
- Research to be published in CSCW 2020

PROJECTS AND EXTRACURRICULARS

Yale Open Music Initiative, *Student Director*

2018 - present

- Created various experimental music controllers to perform improvisatory electronic music
- Taught and coordinated workshops on music technology catering to a wide spectrum of skill levels
- Conducted academic research on programming-by-example for digital signal processing

Pearl Biometrics, *Full-Stack Developer*

2018

- Built PCI-compliant AWS-based biometric authentication platform with Python, Flask, and MySQL, extending local biometrics solutions to the cloud
- Worked with business team to move biometrics solution from concept to prototype

Personal Projects

- **js-pac:** JavaScript Namco Pac-Man board emulator
- **RoboRepair:** Ludum Dare 46 minigame built in 48 hours
- **radi.one:** Experimental chat messaging app

SKILLS AND INTERESTS

- **Technical Languages:** Python, C/C++, JavaScript/TypeScript, Java, GLSL, SQL, HTML/CSS
- **Music Composition**
- **Computational Arts**

Updated July 2020