

# Zachary Mothner

Software Engineer & Designer

## Contact

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## Skills & Interests

- Full-Stack Web & Mobile App Developing, UI/UX Design, Visual Computing, AI/ML, Cloud Storage, Graphic Creation
- Python, Java, HTML/CSS, React, React Native, JavaScript, PHP, SQL, C
- AWS (RDS, Lambda, API Gateway), GCP (Compute Engine)
- Figma, Balsamiq, Adobe CC, Maya
- English (Native Fluency), Mandarin (Conversational Fluency), Spanish (Intermediate)
- Cooking, Running, Painting, Guitar

## Coursework

Object-Oriented Programming, Algorithms & Data Structures, Discrete Structures and Probability, Systems, UI/UX Design, Computer Vision, Software Engineering, Multi-Variable Calculus, Linear Algebra, Statistics, Studio Foundations, Painting, 3-D Studio Foundations

## Awards & Honors

- Morgan Stanley Skill Sprint Coding Competition – Finalist
- Choate Rosemary Hall (High School) – Dean's List each semester, 3.92 GPA, Headmaster's Scholar

## Education

**Brown University** 2018-2022  
Providence, RI GPA: 3.92  
• B.Sc. Candidate in Computer Science & B.A. Candidate in Visual Arts

## Experience

**Pangea.app** Summer 2020  
Software Engineer Providence, RI  
• Stack: React, React Native, JavaScript, Redux, ReQL  
• Redesigned and built v4 of React Native Mobile App and React Web App with team of 7 designers & developers  
• Improved platform and drove > 40% increase in GMV each month

**Brown University,** Fall 2019 – Spring 2020  
Undergraduate Teaching Assistant Providence, RI  
• Fall: Object-Oriented Programming, Introductory Course; Spring: Discrete Structures & Probability in Computer Science  
• Part of a 45-person team assisting 400+ students in the largest course at Brown University  
• Helped students debug code in 4 hours of one-on-one help each week, held two 10-student discussion sections and labs per week  
• Designed and built course website

**GPSopper,** API Developer Intern Summer 2019  
**Brown University,** Meiklejohn Peer Advisor Aug. 2019 - Present  
**Brown Refugee Youth Tutoring,** Mentor Oct. 2018 - Present  
**Office of US Congressman Jim Himes,** Intern Summer 2018  
**Eataly Market NYC,** Retail Associate Summer 2018

## Projects

**WiseUp – NLP Smart Studying Platform** Spring 2020  
• Stack: Java, SQL, Python, JavaScript  
• Flashcard study platform that uses NLP to match semantic instead of syntactical similarity

**Maps Visualizer** Spring 2020  
• Stack: Java, SQL, JavaScript  
• Uses Open Street Maps data to display a map and uses modified Dijkstra's Algorithm and k-nearest neighbors to find shortest paths

**Shell** Fall 2019  
• Stack: C  
• Text-parsing shell, handles 9 built-in commands (cd, jobs, etc.) and executes programs in the foreground and/or background