

# BREKKE GREEN

## ◦ DETAILS ◦

New York City  
570-499-9581

[brekke.andrew.green@gmail.com](mailto:brekke.andrew.green@gmail.com)

## ◦ LINKS ◦

[LinkedIn](#)

[Github](#)

[Portfolio](#)

## ◦ SKILLS ◦

Python, Django  
Amazon WebServices (AWS)  
JavaScript, React, Redux, HTML  
CSS, Ruby, Ruby on Rails  
Mongoose, MongoDB  
Node.js, Express.js, SQL, PostgreSQL  
Webpack, jQuery, Git  
Heroku, Pandas, MATLAB, R

## ◦ EDUCATION ◦

### App Academy

New York, NY | April 2021

Immersive software development  
course with focus on full stack web  
development

### Pennsylvania State University

University Park, PA | August 2015

BS - Kinesiology



## EMPLOYMENT HISTORY

### Software Engineer at Optimal Dynamics (Python, Django, AWS, Airflow, Docker)

September 2021 — December 2022

- Refactored codebase to improve usability, reduced turnaround from weeks to hours and cut execution time by over 50%
- Established weekly engineering book club to foster continuous growth and collaborative culture across the wider engineering team
- Built custom Python integrations for 9+ customers, feeding millions of data points into the AI Engines
- Developed automated data validation tools to better equip customer-facing teams to automate industry knowledge
- Designed first customer-facing integration REST API for live customer data feed through user story mapping sessions
- Supported customer go live process resolving tickets and expanding product features
- Communicated across teams, translating customer requests into technical terms and serving as a conduit between Customer Success, Product and AI/Analytics

### Research Engineer at Katmai Government Services - U.S. Army Aeromedical Research Lab (MATLAB, R, Python)

March 2019 — December 2020

- Engineered custom devices/mechanisms to recreate real-world tasks in a controlled laboratory setting, e.g., a device to simulate long-distance soldier litter carriage tasks
- Acted as subject matter expert on a cross-functional team for topics such as assistive exoskeletons, 3D motion capture/biomechanical measures, and exercise physiology
- Planned and executed research protocols for up to 8 different studies, ranging from characterizing helicopter vibration environments to testing the capabilities of exoskeleton devices to increasing soldier performance to assessing helmet mass properties effect on dismounted soldiers injury risk
- Developed new skills rapidly to facilitate the needs of new studies, such as writing scripts to automate the control of an instrumented treadmill



## PROJECTS

### Seire | (React, Redux, Ruby on Rails, PostgreSQL, HTML, CSS, Heroku)

*Seire is a clone of the popular exercise data app, Strava*

- Implemented custom user authentication on both the frontend and backend, cleanly rendering any login errors to maintain a lightweight, modern user experience
- Integrated the Mapbox API to enable user-created routes and leverage asynchronous JavaScript to accelerate the process
- Produced full CRUD functionality for users' workout creation, presentation, modification, and deletion
- Established a progression tracking user experience with data tabulation using workout results stored on the backend
- Incorporated workout feed that fosters user competition and community

[Live Site](#) | [Github](#)

### Disarray | (MongoDB, Express.js, React, Redux, Node.js, Socket.IO, HTML, CSS, Heroku)

*Multiplayer online Boggle Game built with a retro styling*

- Generated real-time synchronous multiplayer games using Socket.IO to connect various players to a game server
- Built the project as part of a small team, used Git/Github to ensure we maintained a functioning main branch and built out functionality using separate feature branches
- Leveraged React to allow users to input words into the game with various techniques (click vs drag)

[Live Site](#) | [Github](#)