MATTHEW T. MAQUILING

matthew.maquiling@gmail.com • (917) 885-2812 • LinkedIn • GitHub • Portfolio

EDUCATION

App Academy, New York, NY   June 2019 – August 2019
- A 12-week, 1000+ hours, full-stack web development bootcamp with < 3% acceptance rate
- Covered technologies include: Ruby, Ruby on Rails, React.js, Redux, SQL, JavaScript, HTML/CSS

Duke University, Durham, NC   August 2013 – May 2017
- **Dual Major Graduate**: *BS in Mechanical Engineering and Materials Science | BA in English*
- **Relevant Coursework**: Computational Methods in Engineering; Engineering Innovation and Design; Control Systems; Fluid Mechanics; Mechanical Design;

Toolbox: JavaScript, Ruby, Python, React.js, Redux, Rails, PostgreSQL, jQuery, D3, HTML5, CSS3, MATLAB

PROJECT EXPERIENCE

Extralo *(React.js, Redux, Ruby on Rails, PostgreSQL, HTML5, CSS3)*   Live Site | GitHub
- Extralo is a clone of Trello that allows users to create boards, lists, and cards to manage their personal projects
- Used the *react-beautiful-dnd* library to implement visual rendering of the drag-and-drop features for both lists and cards, creating a simple and intuitive way for users to manage their projects and workflow
- Leveraged a custom built linked-list structure in Rails to persist visual drag-and-drop changes to a PostgreSQL database, reducing the time complexity of item reordering to constant time, ensuring the scalability of the app
- Created custom validations in ActiveRecord for the linked-list data structure, causing the app to fail explicitly during testing and notify the developer of what caused the error, reducing the time spent on debugging and troubleshooting

HDWFAbout *(JavaScript, D3, HTML5, CSS3)*   Live Site | GitHub
- Developed an app in vanilla JavaScript that uses sentiment analysis to provide context for events and topics
- Used a third-party API to access news articles and performed sentiment analysis using JS and the AFINN lexicon
- Performed three rounds of focus-testing and design iterations, resulting in a user interface that reduced the time a user needed to understand the app from an average of 67 seconds to <15 seconds

Nairrative (*Python, Python-Flask, MATLAB, SQLite*)   November 2018—May 2019
- Used Python-Flask to develop a website and online tool to increase the efficiency of therapy sessions
- Developing an AI that identifies themes in user journal entries and tracks how a user's mood changes over time, mapping those changes to themes and providing a summary for the user to bring and discuss during a session
- Worked with local Nashville therapists to further develop the tool and identify ways to integrate it into existing processes and healthcare infrastructure

MONQ, LLC. *Data Scientist, Product Development Engineer*, Nashville, TN   August 2017—November 2018
- Worked on 5-person team including another engineer, a pharmaceutical doctor, chemical biologist, and botanist to create an entirely new product designed around natural nootropics and augmenting the limits of human productivity
- Lead ergonomic optimization efforts for the company's second generation product, drafting and submitting patents for a new design that increased the product usability by 56%
- Used Python to run principal-component and linear-discriminant analyses on consumer and market data, resulting in 3 new KPI strongly correlated with daily revenue performance
- Developed new processes for parallel experimentation in email marketing, increasing throughput by 300%, and via the improved experimentation process, increased click-through-rates by 63% over a 6-week period

LEADERSHIP EXPERIENCE

Chi Psi Fraternity, Inc., *President, Vice President, Recruitment Chair,* Durham, NC   September 2014—December 2017
- Co-founded fraternity of 42 brothers
- Led a board of 7 elected Executive Members and advised all internal committees and officer positions
- Managed an operating budget of $30,000 for all fraternity activities, including recruitment and public relation events
- Oversaw planning for 30+ brotherhood and educational events for brothers and potential members
- Identified key issues within the fraternity and developed solution plans for each, including an alumni-parent newsletter, a formalized officer transition process, and the creation of an internal conduct board
- Implemented risk management policies, educational assistance programs, and networking initiatives
- Coordinated regularly with alumni, administration, businesses, and other student groups on behalf of the fraternity