Jeremy Santiago
Software Engineer

9jsantiago4@gmail.com   LinkedIn   Github   Website

SKILLS JavaScript, React/Redux, Express.js, Node.js, Python, Pandas, NumPy, Ruby on Rails, RSpec, HTML/CSS, PostgreSQL, MongoDB, AWS S3, Render, Git, Webpack, Postman, AgileStarts™, Minitab, Six Sigma Green Belt, TDD, RDBMS

PROJECTS

Eventlite - FS Clone of Eventbrite ｜ *(React/Redux, Ruby on Rails, PostgreSQL, AWS)*   live | **github**
- Integrated AWS S3 SDK with backend to allow users to upload images without affecting scalability of site
- Designed RESTful API endpoints as well as custom routes that minimize database fetch requests while providing consistent Redux state across all pages

DC MicroMobility Map - Single Page App ｜ *(Javascript, Node/Express.js, Leaflet Library, DC Shared Fleet API)*   live | **github**
- Developed visualization of live bike/scooter data by sending AJAX requests multiple DC Shared Fleet API's
- Improved visual aesthetics of bike and scooter data points by leveraging Leaflet JS library to create custom marker clusters that dynamically change number of markers based on map zoom level

Weave - Group MERN Stack App ｜ *(React/Redux, Express, MongoDB, GoogleMaps API, Node Mailer)*   live | **github**
- Implemented Node Mailer in Express backend to provide 2-layer authentication before adding recipient to trip
- Optimized design of BSON documents to minimizes database storage and minimize Google Map API fetches
- Initiated task tracking system to streamline daily standup discussions and delegate critical tasks to feature leads

EXPERIENCE

Research & Advanced Engineering - Project Lead   Jul 2021 - Aug 2022
Ford Motor Company (186,000 employees, $136.3 billion revenue)
- **Prototyped web app** with group of 3 engineers to search employee information based on location and expertise tags utilizing python scripts and **Yammer API (yampy)**
- Analyzed 10,000+ customer thermal battery data entries by importing **feather file** format into **pandas** library to define product requirements and build **python scripts** for automating designs
- Championed development of additive manufacturing applications for mass production with team of 5+ engineers by identifying applications, defining requirements, experiments, and filing **2 patent applications**
- Collaborated with suppliers & product team leadership to lead 30% reduction for EV cost/part with 200K annual volume by developing economic models, **technology roadmaps** for design and manufacturing process

Lead Research Engineer / Leadership Rotational Program   Jul 2017 - Jun 2021
Eaton Corporation (86,000 employees, $19.63 billion revenue)
- Engaged with global multi-functional team to lead systems engineering of **20+ IoT** connected lighting products that communicate with building **LAN** from scoping phase (Gate 1) to product launch (Gate 4)
- Partnered with software engineers to develop python scripts for assessing **transmission efficiency** and 2d antenna radiation measurement between dongle and **ZigBee** integrated product
- Led teams of 3+ engineers and managed $400K budget to advance technology at various stages from early concept to commercialized product, filed **5 patent applications** for Department of Energy Program
- Communicated value of novel material design, gained business alignment with product teams to scope work for **$1+ million government proposals** in the areas of autonomous digital design, vehicle, and aerospace electrification

EDUCATION

App Academy - Software Engineering Bootcamp   Sep 2022 - Jan 2023
University of Pennsylvania - *B.S. & M.S. Mechanical Engineering*   Sep 2012 - May 2017

COMMUNITY
- Penn Alumni Board of Diversity, Equity, & Inclusion - Treasurer   Mar 2021 - Mar 2022
- Society of Hispanic Professional Engineers - Detroit Board Member   Jul 2020 - Jul 2022
- Eaton National Diversity Committee - Lead   Mar 2019 - Jun 2021