Andrew Culkin

andrewsculkin@gmail.com | 125 Guest St, Brighton MA | (508) 284-6353 | aculkin.com | github.com/aculkin

Professional Experience:

Bot Watt (Clean energy DaaS company - Waltham, MA): *Co-founder & Lead Product Engineer*   (Jan 2021 - Present)
- Designed and built an SEO-optimized data platform with over 1M+ data records using the PERN stack
- Developed a workflow process to aggregate multiple separate data sources into over 300k clean energy generating facilities, development projects, and company records
- Obtained non-published public records via official Public Records Requests and appeals to state governments
- Implemented a microservice architecture to keep frequently changing data sources updated and propagate data changes throughout all the facility and project records in the Bot Watt project database

Roof Rally (Online roofing marketplace - Brighton, MA): *Co-founder & Engineering Lead*   (Jun 2019 - Oct 2020)
- Coordinated the development of a full-stack progressive web application to process customer requests, integrate 3rd party digital measurements, and match the customer with local service providers using a blind bidding methodology
- Led a team of junior software engineers to develop the company web application and backend architecture
- Optimized the process for customer onboarding based on previous customer experience and feedback

Ernst & Young (Professional services consulting - New York, NY): *Technology Risk Consultant*   (Aug 2017 - Jun 2019)
- *Client: Spin-off Life Insurance Company – Charlotte, NC*
  - Established a program to assess the clients continually evolving IT Risk and Control environment
  - Conducted a quarterly enterprise-wide IT Risk Assessment for the client
  - Developed business requirement documentation for the IT Risk module in the eGRC solution OpenPages
  - Managed the development, testing, and implementation of an IT Risk module within the eGRC solution, OpenPages
- *Client: Fortune 500 Financial Services Company – New York, NY*
  - Collaborated with the tech team to develop requirements for a tool to store, track, & report on third-party contracts
  - Worked with multiple business functions to create a list of relevant data attributes for the third-party inventory tool to support the tracking of strategic objectives for the overall business
  - Assembled a list of categories for the third-party inventory tool based on general ledger data and entries
  - Created & maintained an engagement budget tool containing several predictive metrics of engagement profitability

ECA Solar (Solar PV project development): *System Design Engineer*   (Jan 2017 - Aug 2017)
- Engineered several PV electrical systems including inverter sizing, PV string layouts, and connection to the grid
- Designed several commercial-scale roof-top solar systems in compliance with applicable state building regulations
- Developed a macro enabled excel tool to automatically calculate the ideal inverters given the number of panels
- Analyzed cash flow models for several large-scale roof-top solar projects

Education:

Fullstack Academy - New York, NY: *Software Engineering Immersive program*
- Completed the immersive 17-week software engineering boot camp with a focus on modern web development

Lehigh University - Bethlehem, PA: *Dual degree Integrated Business and Engineering (IBE) honors program*
- Mechanical Engineering (B.S.) - Energy Engineering minor
- Integrated Business & Engineering (B.S.) - Financial Mathematics concentration

Projects:

Linksmart: *"Single-link" tool and associated web-app*
- Users can create a dedicated link page similar to Linktree
- Uses Redux as a state management tool for user accounts
- Shows statistics about page interaction (Pageviews, click-through-rate, page referrers, and top devices)

Personal Website: *Showcases my development experience*
- Built with Typescript, NextJS, React, and Semantic UI; deployed and hosted with Netlify
- Integrated API to pull and update data from google sheets updating the site on a weekly basis

Skills:
- **Languages:** Javascript, Typescript, SQL, HTML, CSS, Python, Solidity, Matlab
- **Frameworks:** Node.JS, React, Redux, Express, Next.JS, Django (including DRF), Sequelize, Testing Library, Puppeteer
- **Technologies:** AWS, Heroku, Stripe, Mapbox, Google Analytics, Twilio, Rollbar, Sendgrid, Unbounce, Mailchimp

Certifications/Awards:
- Fullstack Academy Software Engineering Bootcamp completion
- Fundamentals of Engineering (FE)
- A+ Certification - IT Technician: (CompTIA certification)
- Eagle Scout: Boy Scouts of America