Andrew Culkin - Resume

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Profesional 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 data into 300k clean energy generating facilities and development projects
  - Obtained public records via official Public Records Requests and appeals to several state governments
  - Implemented a microservice architecture to keep frequently changing data sources updated and propagate 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, measure the roof digitally, 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 platform and customer experience
  - Developed and optimized the process for customer onboarding based on the 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, and report on third-party contracts
    - Worked with multiple business functions to understand create a list of relevant data attributes for the third-party inventory tool to support the strategic objectives
    - Assembled a list of third party categories for the third-party inventory tool based on general ledger data
    - Created and 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 full-time 17-week software engineering boot camp with a focus on 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 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 weekly

Skills:

- **Languages:** Javascript, Typescript, SQL, HTML, CSS, Python, Matlab
- **Frameworks:** NodeJS, React, Redux, Express, NextJS, Sequelize, React Testing Library, Puppeteer
- **Technologies:** AWS, Heroku, Stripe, Mapbox, Google Analytics, Twilio, Rollbar, Sendgrid, Unbounce, Mailchimp

Certifications/Awards:

- Fundamentals of Engineering (Mechanical Engineering)
- A+ Certification - IT Technician: (CompTIA certification)
- Eagle Scout: Boy Scouts of America