Mike Barberry

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[GitHub](#) | [LinkedIn](#)

Experienced engineer adept at consistently delivering sophisticated software solutions from ambiguous requirements within tight deadlines using diverse technologies. Accomplished problem-solver with a strong ability to empathize with stakeholder perspectives.

TECHNICAL SKILLS

Languages: Python, JavaScript, SQL, HTML/CSS, MongoDB QL, Bash, Go
Libraries/Frameworks: React.js, Node.js, Next.js, TypeScript, Express.js, Jest, Mocha, Puppeteer, D3/Plotly, Pygame, Matplotlib, Scikit-learn, Pandas, NumPy
Tools & Platforms: Git, Unix/Linux, Docker, Nginx, AWS (S3, Lambda, ECS, CloudFormation, Route53, API Gateway, CloudFront, IAM, SES, etc.)
Management + Design: Jira, Figma, Whimsical, Trello, Azure DevOpS

PROFESSIONAL EXPERIENCE

Digital Infuzion   *Software Engineer   (Remote)*   Dec 2022 – Present
Digital Infuzion is a technology company based on NIH contracts.

- **Flu Hub:** Engineered a new full-stack NIH website within a demanding 4-sprint deadline, delivering a robust and scalable solution designed to provide resources and information, with a potential user base of over 300 million individuals.
- **CEIRR Data Search:** Developed a new version of a visually compelling and highly interactive data search page, drawing from a previous implementation, for a private portal where users can search from over one million records in 30+ project categories within rigorous time constraints.
- **Data Visualization, Parallel Coordinates:** Designed and constructed a parallel coordinates chart to elucidate relationships between NIH funded grants totalling approximately one billion dollars and project output, and created a website for stakeholder access and exploration, after processing fragmented data.
- **Automated 508 Compliance Tool:** Automated collection and reporting of Section 508 software accessibility compliance alerts from any website within a tight 3-week timeline, saving the company thousands of dollars in paid subscription services.
- **Data Visualization, NLP and Scatter Plots:** Architected data visualizations to gain insight into how over 900 NIH funded grants totaling over 800 million dollars relate to one another using Python and natural language processing (NLP), and created a website where stakeholders can easily access and explore these scatter plots, all within a 4-week deadline.

Competitive Solutions   *Software Engineer   (Remote)*   April 2019 – Dec 2022
Competitive Solutions is a technology company that produces their own software and develops solutions for various client contracts.

- **Document Upload:** Designed and developed a solution to allow admin users to upload and attach documents to regular user data, including the upload pages, server logic to upload the documents to S3 and add metadata to a new MongoDB collection, and features to edit metadata or delete the documents, including the ability for uploaders to optionally send an email to other qualified users.
- **NanoID:** Implemented stakeholder requirement to display short IDs on the website by researching, adding a tool, updating the website, modifying the server side logic, and extending the database.

- **Data Sharing with Partner:** Created AWS S3 buckets, Node.js AWS Lambda functions, and AWS IAM permissions to facilitate secure, authorized data sharing with a partner organization

PERSONAL PROJECTS

MikeBarberry.com Personal website with fun features | **catfacts** Multithreaded Python program about cat breeds | **Quote Generator** TV show quotes based on custom HTML elements | **GoTasker** To do list website with a Go server

EDUCATION

Flatiron School — Software Engineering Bootcamp   2019

University College London — MA in Philosophy   2016

Indiana University Bloomington — BA in Neuroscience   2015