Mike Barberry

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(971) 977-2927

TECHNICAL SKILLS

Languages: JavaScript, Python3, HTML/CSS, SQL, MongoDBQL, Bash, Go
Libraries/Frameworks: Node.js, React.js, Next.js, Express.js, Plotly, pandas, NumPy, scikit-learn
Tools & Platforms: Git, Unix/Linux command line, Nginx, Netlify, Docker, AWS (Lambda, S3, SAM, etc.)
Management + Design: Jira, Figma, Whimsical, Trello, Azure DevOps

PROFESSIONAL EXPERIENCE

Digital Infuzion   Remote
Software Engineer   Dec 2022 – Present

- **Flu Hub:** *Requirement:* Build a new National of Institutes of Health public website in four months that provides an informational resource portal for influenza researchers *Actions:* (1) Created 8 pages utilizing React and Next.js with MUI (2) Controlled flow of information from Strapi.js CMS API and client app (3) Crafted Dockerfiles and CloudFormation SAM templates for deployments (4) Engineered reactive, styled components responsive to user input (5) Built AG Grid data table page and filtering logic
- **Natural Language Processing:** *Requirement:* Create 3D scatter plots from Excel file data after performing NLP. *Actions:* (1) Read input from columns and vectorized data using bag-of-words and TF-IDF (2) Performed reduction on vectors utilizing scikit-learn PCI and UMAP (3) Created plots and S3 website from HTML output
- **Automation:** *Requirement:* Determine how to implement contractually obligated assessment *Actions:* (1) Evaluated resource and monetary costs of previous implementation (2) Designed a software program to automate collecting information pertinent to the assessment and generate a report (3) Implemented design utilizing Node.js, Puppeteer, ANDI, and PDFKit (4) Assisted team members consuming output
- **Parallel Coordinates Visualization:** *Requirement:* Build a parallel coordinates graph from data in 3 CSV files. *Actions:* (1) Cleaned, processed, and combined data (2) Researched HiPlot and built a React website to load and display the data as an interactive parallel coordinates graph (3) Deployed to S3 for stakeholder engagement

Competitive Solutions   Remote
Software Engineer   Apr 2021 – Dec 2022

- **Nano ID:** *Requirement:* Provide shorter IDs on the user interface than the 26 character MongoDB default *Actions:* (1) Researched libraries (2) Imported nanoid library on the back end and integrated it (3) Wrote a Node.js script to add nanoids to existing data (4) Updated API and React components
- **Document Upload:** *Requirement(s):* Add a feature to allow admin to attach documents to regular user data. *Actions:* (1) Created AWS S3 infrastructure to store files (2) Built Express.js API to receive data and perform S3 uploads (3) Developed React components to handle uploading files (4) Engineered additional business logic to store document metadata and send emails.
- **Data Sharing with Partner Organization:** Built Lambda functions and S3 buckets to exchange data

Project Manager   Mar 2019 – Apr 2021
- Collaborated with engineers and stakeholders to ensure business goals translated into useful product features and effective outcomes
- Defined user stories, created mockups, wireframes, sketches, and storyboards to aid development.

PERSONAL PROJECTS

MikeBarberry.com Next.js | GoTasker Go | CatFacts Python3 | Quote Generator JavaScript

EDUCATION

Flatiron School **Bootcamp:** Software Engineering		2021
University College London **MA:** Philosophy		2016
Indiana University Bloomington **BA:** Neuroscience		2015