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NATHAN CAREY

careyn.github.io

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EDUCATION

Boston, MA Northeastern University

Sept. 2019 – Present

Candidate for a Bachelor of Science degree in Computer Science, Minor in Physics (2023)

- Honors: Dean's List GPA 3.6/4.0
- Relevant Coursework: Object Oriented Design, Database Design, Web Development, Theory of Computation, Algorithms and Data, Discrete Structures, Mathematics of Data Models, Networks and Distributed Systems
- · Activities: NUHacks, HC Programming Challenges, Disrupt: Fintech, Campaign Canvassing

EMPLOYMENT

Software Engineer Intern

NASA

Jan. 2022 - Present

- Researched Key Performance Indicators to help develop a launch success decision tool.
- Aided in building a risk analysis framework in Python that flags potential failures before a launch is made.
- Aggregated and upgraded existing Fortran scripts into a single Python program to determine material stress levels during the ascent phase of balloon launches based on an automatically generated JSON spec file.
- Performed Monte-Carlo simulations to highlight possible trajectories and areas of impact post-termination.
- Redesigned the existing office website to facilitate seamless content updates.

Software Engineer Intern

FacilityConneX

June 2021 - Jan. 2022

- Overhauled C# analytics with upgrades to an advanced pandas-based Python framework, resulting in a 40% reduction in codebase size while also adding additional alerting and custom error results.
- Deployed new analytics to AWS lambdas and validated results against sanitized Apache Druid data.
- Established REST APIs that leveraged Redis to allow customers to import analytic configurations from one deployment to another, as well as import visualization templates across equipment types.
- Designed front-end Angular components for import and export functionality using Bootstrap and AG Grid.

Software Consultant Intern

Kearney

April 2020 - June 2020

- Consulted on the IoT rollout for an international, multi-billion-dollar retail and eCommerce company.
- Expedited market trend analysis with an automated Python web-scraper, increasing speed by 300%.
- · Conceptualized mock UI interfaces for multiple upcoming mobile platforms using Figma.
- Researched software and system design in order to perform educational presentations for business team.
- Prepared strategic technical recommendations to aid in the progression of cloud platform decisions.

PROJECTS

Bug Tracker

Fall 2021

- Jira-esque full-stack web application to track progress on bugs and assign issues to users.
- Built using the MEAN stack, leverages MongoDB to store records of users/issues, and builds components for each issue using Angular. Role attribute is used to set the scope of issue CRUD abilities for each user.

Depop Summary Spring 2021

- Python Flask based web application to build dynamic summaries of Depop sellers' products.
- Leverages Selenium and Beautiful Soup to scrape stock based on a given username, and outputs a summary webpage built using bootstrapped Flask templates and MySQL for displaying and storing relevant data.

COMPUTER KNOWLEDGE

- · Languages: Java, Python, JavaScript, TypeScript, HTML/CSS, SQL, PHP
- Frameworks & Tools: NodeJS, AngularJS, ExpressJS, ReactJS, Bootstrap, Flask, MongoDB, MySQL, JDBC, Redis, pandas, NumPy, Selenium, Kubernetes, Okteto, PyEnv, Maven, AWS Lambda, Jira, Git/GitHub, Linux/WSL