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NATHAN CAREY

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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 (2024)*
- 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
- Activities: NUHacks, HC Programming Challenges, Disrupt: Fintech, Campaign Canvassing

EMPLOYMENT

Software Engineer, Intern **FacilityConneX** **June 2021 – Present**

- Assisted in the build-out of an analytics library on next generation Python based framework.
- Worked alongside software developers and subject matter experts to translate algorithms into commercially viable products and services.
- Worked in technical teams for development, deployment, and application of applied, predictive, and prescriptive analytics.

Technical Consultant, Trainee **Kearney** **April 2020 – June 2020**

- Consulted on IoT rollout for an international, multi-billion-dollar retail and eCommerce company.
- Researched software/technical architecture and performed market trend analysis.
- Prepared technical recommendations to aid in the progression of strategic architectural decisions.

PROJECTS

Music Critique **Fall 2020**

- Created a platform to allow artists and critics to interact, submit playlists, and leave critiques.
- Maintained an **SQL** database to control user login details, manage **CRUD** privileges for each user.
- Used **JPA**, **JDBC**, and **ORM** to interact with the **Java** application.

Easy Animator **Fall 2020**

- Interactive animation editor that can read text files and convert to keyframe animations.
- Supports rotations, size and color changes, and transformations of various enumerated shape classes – can display textual representations, **Java Swing** animations, and **SVG** animations.
- Made with **Java** using **MVC** design pattern with specific attention to **Junit** testing.

Number Recognition **Spring 2020**

- Initially a **Racket** based (**Functional Programming**) application that measured and compared the Euclidian distance between given handwritten digits and a set of training data to return the closest match.
- Converted to a **Python** application using the MNIST database to learn and **Matplotlib** to visualize.
- Two approaches implemented – Simple approach with a trained **Scikit-Learn** Neural Network, and a Gradient/ Backpropagation approach using **NumPy** to manually train a small network and predict results.

COMPUTER KNOWLEDGE

- Languages: Java, Python, HTML/CSS, JavaScript, SQL, PHP, Scheme
- Software/Tools: Git, JetBrains IDEs, Eclipse, MySQL, Spring, Maven, Heroku, Node.js, MongoDB, Mongoose
- Systems: Windows 10, Linux/Unix, macOS

References available upon request