

# DANA ROCHA

dbridgette.rocha@gmail.com | [linkedin.com/in/rochadana](https://www.linkedin.com/in/rochadana) | [github.com/dana-rocha](https://github.com/dana-rocha) | [dana-rocha.com](https://dana-rocha.com)

## TECHNICAL SKILLS

**Languages & Frameworks:** Python (Apache Airflow, Flask), JavaScript (React, Material UI), HTML, CSS (Materialize), SQL, R

**Tools & Platforms:** Git, GitHub, AWS, VS Code, Unix/Linux, REST APIs, CI/CD, Docker, RStudio, Firebase

**Databases:** PostgreSQL, MongoDB, Google Firestore

## WORK EXPERIENCE

### Allen Institute

Seattle, WA

#### **Data Analyst I - Allen Institute for Brain Science**

Mar 2023 – Present

- Currently designing and implementing an automation solution for an AWS-based data processing pipeline using Apache Airflow and Python, collaborating with software engineering team to ensure efficient solutions
- Enhanced an internal Python package by adding a method to streamline data report exports and updated SQL queries to include richer metadata, improving visibility into data processing outputs
- Developed a user-friendly web application using Shiny, optimizing weekly data analysis by 30% through automated data updates and expedited access to metadata across multiple modalities
- Improved front-end features across 10+ Shiny web applications that centralize data extraction, visualization, and analysis through close collaboration with stakeholders
- Directed internal programs and events, promoting employee engagement and alignment with organizational objectives for 2024 and 2025

#### **Software Engineer Intern - Allen Institute for Neural Dynamics**

Aug 2022 – Jan 2023

- Led end-to-end development of a Minimum Viable Product (MVP) web application, which helped the organization realize the need to adopt an alternative solution for data sharing
  - Designed a responsive front-end user interface using React components and a service layer for REST API queries
  - Synthesized requirements from stakeholders and produced wireframes to guide web application design
  - Implemented unit tests, test automation, and continuous integration through Jest, ESLint, and GitHub Actions
- Added credential file automation to an open-source Python package, simplifying secure resource access
- Integrated dataset search via third-party REST API in an open-source Python package, streamlining data discoverability
- Incorporated features for JSON schema validation and export into an open-source Python package, allowing users to define reusable metadata templates

### Merck & Co.

Boston, MA

#### **Informatics Intern**

Jan 2020 – Aug 2020

- Trained machine learning models to predict high-value compounds for early-phase testing, supporting data-driven decisions for three active drug discovery teams
- Built ETL pipelines using Oracle DBMS, SQL, Pipeline Pilot, and PilotScript to integrate data from public and internal sources, enabling downstream analysis and supporting data-driven decision making across the organization
- Presented monthly data insights to 50+ stakeholders, ensuring alignment with strategic objectives

## TECHNICAL PROJECTS

#### **Room Reservation System, Capstone project – [GitHub](#)**

Aug 2022

Web application to track room reservation information - developed with JavaScript, React, Google Firebase

- Collaborated closely in a two-person team to design, develop, and successfully deliver the project
- Wrote backend logic, database endpoints, and secure user authentication
- Crafted algorithms to create, delete, and prevent double-booking of reservations
- Established a responsive user interface of 3 pages utilizing Materialize and React Router for optimal user experience

#### **Inspiration Board, Group project – [GitHub](#)**

Jul 2022

Web application where users can leave “sticky notes” on digital boards - developed with JavaScript, React, Python, Flask

- Led a four-person team to deliver an interactive web app for creating, reading, and deleting boards and notes
- Constructed two React components that enable users to like or delete a note and display notes from a selected board

## EDUCATION

### **Ada Developers Academy**

Seattle, WA

Full Stack Web Development & Computer Science Fundamentals

Mar 2022 – Jan 2023

Technologies: Python, JavaScript, SQL, PostgreSQL, Flask, React

### **Northeastern University**

Boston, MA

B.S. in Biochemistry, M.S in Bioinformatics

2018, 2020

Relevant Courses: Algorithms, Data Mining/Machine Learning, Python Programming