

# DANA ROCHA

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## EDUCATION

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### Northeastern University

*Master of Science in Bioinformatics, Graduate Certificate in Data Analytics (3.66/4.0)*

Relevant Coursework: Algorithms, Bioinformatics Programming, Data Mining/Machine Learning

**Boston, MA**

*Dec 2020*

### Northeastern University

*Bachelor of Science in Biochemistry*

**Boston, MA**

*Aug 2018*

## TECHNICAL SKILLS

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**Languages** Python, R, SQL, HTML5, CSS3, JavaScript

**Packages** Matplotlib, Pandas, NumPy, Ggplot2

**Tools** Visual Studio Code, PyCharm, RStudio, Spotfire, Pipeline Pilot, Confluence, SharePoint

**Databases** Oracle, MySQL, MongoDB

## PROFESSIONAL EXPERIENCE

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### Merck & Co.

*Informatics Co-op – MRL Computational and Structural Chemistry*

**Boston, MA**

*Jan 2020 – Aug 2020*

- Trained machine learning models to identify relationships between compounds, genes, and diseases
- Queried chemical data from public and internal databases using Pipeline Pilot, Pilot Script, and SQL
- Delivered compound sets to three drug discovery research programs in Chemical Biology for initial testing
- Created interactive Spotfire data visualization dashboards for over 140,000 compounds and genes
- Presented data insights to chemists and data scientists within Chemical Biology and Informatics
- Led weekly meetings with co-workers to promote an inclusive virtual community during global pandemic

### Orig3n Inc.

*Research Assistant Co-op*

**Boston, MA**

*Jul 2017 – Dec 2017*

- Maintained stem cell cultures for internal assays and animal studies
- Characterized stem cell cultures with fluorescence microscopy and flow cytometry
- Represented Orig3n as a brand ambassador at events in New York City, Baltimore, and Lake Tahoe

### Brigham and Women's Hospital

*Lab Technician Co-op – CCI Specimen Processing Lab*

**Boston, MA**

*Jun 2016 – Dec 2016*

- Processed specimens for clinical studies conducted by the CCI Units and Emergency Department
- Completed all documentation required for individual specimens according to protocol requirements
- Maintained laboratory instrumentation to performance standards

## LEADERSHIP EXPERIENCE

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### Northeastern University

*Student Facilitator – Graduate Leadership Institute*

**Remote**

*Feb 2021 – Present*

- Mentored 40 graduate students on developing leadership competencies outlined by learning goals
- Led weekly online workshops and discussions with students
- Oversaw logistics for online workshops and discussions using Zoom and FlipGrid
- Hosted weekly virtual meetings with co-facilitators to plan workshops, activities, and presentations

## PROJECTS

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### Heart Failure Prediction

**Dec 2020**

- Created classification models to predict survival of heart failure patients using R with over 81% accuracy
- Trained, tested, tuned classification models using k-NN, Support Vector Machines, and ANN algorithms
- Built a bootstrapped ensemble model with 86.66% prediction accuracy