

Ross Donatelli

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Phone

321-501-2433

Websites

rosstelli.github.io, rosstelli.herokuapp.com

TECHNICAL SKILLS

Programming Languages

Java, R, Ruby, JavaScript, MATLAB, Octave, Python, C++, PHP, Fortran

Analysis Techniques

Model fitting, Regression, Supervised Learning, Expectation Maximization

Frameworks, Tools, & Software

Ruby on Rails, D3.js, Node JS, React.js, Redux.js, Git, VirtualBox, Docker, XCode (iOS), Android Studio, Apache, Tomcat

Database Technologies

PostgreSQL, Amazon Web Services (S3, DynamoDB & Elastic Beanstalk), SQLite, Pythia (OSU developed)

RELEVANT EXPERIENCE

Data Analyst

September 2017 – April 2019

JMI Laboratories

North Liberty, IA

- Consolidated data for over 100 abstracts, posters, and scientific publications on antimicrobial surveillance data through PostgreSQL and Ruby
- Provided and designed additional features for Ruby on Rails application, such as access to R packages and UI changes in Ember.js
- Analyzed antimicrobial susceptibility and microbial molecular data with artificial intelligence and statistical methods, including Gaussian Mixture Models, Nonlinear fitting, Logistic Regression, etc.
- Developed and maintained Calculations App web application to minimize manual work for daily chemical calculations of antimicrobial panel production
- Managed the Data Analysis department and workflow queue, including JIRA oversight, Amazon EC2 instances and task delegation while company was in transition period
- Visualized and automated data and analysis with graphics in D3.js, R, Python, and Ruby
- Pioneered the full implementation of the iterative Gaussian fitting algorithm for Epidemiological Cutoff Values designed by J. Turnidge et al. using the BFGS optimization algorithm in R

Analytical Software Intern

June 2017 – August 2017

ENSCO, Inc.

Melbourne, FL

- Researched statistical and machine learning techniques for optimization of maximizing probability functions using R and subsequently Fortran
- Successfully implemented a custom gradient descent algorithm to improve previous model accuracy and speed (use case improved from 4 hour run time to 90 seconds)
- Parallelized and published the algorithm to the company web application

EDUCATION

Master of Science, Computer Science, Study – Artificial Intelligence

GPA: 3.60/4.0

The Ohio State University, Columbus, OH

August 2017

Bachelor of Science, Biomathematics, Minor – Computer Science

GPA: 3.85/4.0

Florida Institute of Technology, Melbourne, FL

May 2015

PROJECTS & OTHER EXPERIENCE

Personal Portfolio

rosstelli.github.io

My Web App

rosstelli.herokuapp.com

Graduate Research & Teaching Assistantship at the Ohio State University

August 2015 – August 2017

Software Engineer Intern at ENSCO, Inc.

May 2015 – August 2015

Student Research Intern at North Carolina State University

May 2014 – July 2014

Student Research Intern at Virginia Polytechnic Institute

May 2013 – August 2013