# Jeremiah Bill

github.com/jer96 | csug.rochester.edu/u/jbill3/profile | jbill3@u.rochester.edu

## Software Engineering Qualifications

- **Programming languages:** Python, Node.js, Java, Android, C, HTML/CSS/Javascript.
- **Programming tools:** Git/GitHub, REST, SQL, Redis, MongoDB, Microsoft Azure, Docker, Selenium, Bootstrap.
- Excellent grasp of Full-Stack Web Development, Agile Workflow, Object-Oriented Programming, Test Driven Development and MVC Software Design Pattern.

## Education

## University of Rochester - Bachelor of Science in Computer Science, Expected May 2018

- GPA **3.33**
- Relevant Course Work: Data Mining, Programming Language Design, Computer Organization, Mobile/Web Development, Artificial Intelligence, Data Structures, Design and Analysis of Algorithms, Linear Algebra, Statistics.
- **Future Course Work:** Machine Learning, Econometrics.
- Martin Luther King Jr. Character Education Program Volunteer, Monroe Correctional Facility.

## Experience

#### SOFTWARE ENGINEER, GALAHAD GROUP INC, ROCHESTER, NY - SEPTEMBER 2017- PRESENT

- Currently building web-based chat bot solutions using Node.js, MongoDB, Microsoft Azure and Dialogflow to offer clients virtual assistants which optimize key aspects of their lives and enterprise processes.
- Developing prototypes and client demoes to facilitate automation and enhance customer experiences.
- Member of a small cross-functional team, contributing to software design and framework decisions.

#### SOFTWARE DEVELOPER INTERN, IBM WATSON, GREATER BOSTON AREA - MAY 2017 - AUGUST 2017

- Member of the Watson Conversation Service team as a Backend Software Developer.
- Contributed to the development, maintenance and testing of the virtual agent solution which allows clients to build, deploy and test chat bots to facilitate natural conversation between their application and end users.
- ▶ Developed caching mechanism using Redis and Node.js to optimize throughput of messages sent from users to core Watson API's. This enhancement improved round trip time of the main message endpoint by 70%.
- Participated in a nationwide hackathon with five other team members building a cognitive chat bot to support immigrants seeking citizenship in the United States.
  - $Website: \underline{apertus\text{-}colloquium\text{.}mybluemix.net}\ Code: \underline{github.com/jer96/IBM\text{-}Hackathon\text{-}ChatBot}$

## TEACHING ASSISTANT, UNIV. OF ROCHESTER COMPUTER SCIENCE DEPT, ROCHESTER, NY - SEPTEMBER 2015 - DECEMBER 2016

- Managed course email, assigned students to lab sessions, resolved scheduling conflicts.
- ▶ Hosted lab sessions introducing students to fundamental programming and computer science topics using Java.
- Graded and provided feedback on labs and projects.

### SOFTWARE TEST ENGINEER INTERN, THOMSON REUTERS, ROCHESTER, NY - MAY 2016 - AUGUST 2016

- Created automated testing tools addressing regression testing, manual testing and bug fixes.
- Updated test suite to accommodate code base updates and new product features using Java.
- ▶ Implemented proof of concept test suite for companion application using C#.

# **Computer Science Projects**

## CAREER PATH PREDICTION, DATA MINING - OCTOBER 2017 - DECEMBER 2017

Gathered and analyzed data from various sources to model career trajectories and gain insight on the current job and education market. Built data preprocessing and mining tools using Python to scrape web based data and analyze collected datasets. Achieved accurate results outlining the role education and work experience play in predicting future job industry, salary and employability. Code and report: <a href="mailto:github.com/jer96/CareerPathPrediction">github.com/jer96/CareerPathPrediction</a>

### UR MARKET, WEB PROGRAMMING/MOBILE APP DEVELOPMENT – SPRING 2016/SPRING 2017

Built web and mobile application to give students and faculty of the University of Rochester a unified application to buy and sell goods locally as opposed to using bulletin boards or other unstructured online resources. Web application built using Node.js, HTML/CSS/JS, MYSQL and the mobile application built using Android and SQLite.