

# Derek Maciel

New Jersey

🏠 [derekmaciel.com](http://derekmaciel.com)   [github.com/dere](https://github.com/dere)

## Education

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### Rutgers University

New Brunswick, NJ

B.S. IN COMPUTER SCIENCE

Expected: May 2019

- Courses: Compilers, Operating System Design, Distributed Systems, Computer Security
- Fall 2016 Mentor in the Rutgers USACS Computer Science Mentorship program

## Skills

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**Languages** Python, JavaScript, C, C#, Java

**Tools/Frameworks** Linux, Git, AWS, Flask, Salt, MySQL, MongoDB, Elasticsearch, Node.js, React

## Experience

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### Capital One

Wilmington, DE

SOFTWARE ENGINEERING INTERN

Jun. 2018 — Aug. 2018

- Developed a Kibana plugin web app using React and Node.js to train a machine-learning classification model
- Utilized the New Relic API to integrate monitoring and health visualizations to a Python application running on AWS
- Reduced error rate in a call center recording transcription machine learning model from 10% to less than 0.1%

### SIG: Susquehanna International Group

Philadelphia, PA

SOFTWARE DEVELOPMENT INTERN

Jun. 2017 — Aug. 2017

- Designed and implemented in C# a system for managing positions in financial instruments for a team of traders
- Wrote scrapers and parsers to periodically gather data from various markets to import into the application
- Improved trading accuracy and saved 10 hours per month for each trader on the team

### Open System Solutions at Rutgers University

New Brunswick, NJ

STUDENT SYSTEMS PROGRAMMER

Jan. 2016 — May 2017

- Designed and implemented a RESTful API in Flask and MongoDB to replace a legacy application
- Fixed critical bugs and added CSV exporting to a employee hours-tracking web app in Python using Flask and MySQL
- Developed a command-line frontend to rsync in Python to improve the Rutgers University Linux distribution mirrors
- Configured and maintained CentOS Linux and Solaris servers with Salt and Cobbler

## Projects

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### Strawberry Bot

Personal Project

[GITHUB.COM/DERE/STRAWBERRYBOT](https://github.com/dere/strawberrybot)

- Music-playing bot for the voice chat program Discord, written in JavaScript using Node.js, deployed on Debian Linux
- Uses the Discord API and youtube-dl to accept YouTube song requests and stream them into the voice channel
- Plugin system allows functionality to be selectively disabled and allows users to extend the bot for other functions

### Salt

Open Source Contributor

[GITHUB.COM/SALTSTACK/SALT](https://github.com/saltstack/salt)

- Reported and fixed a High Priority bug with RPM package installation (Pull Request #35119).