

# Stephen Sanchagrin

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## EDUCATION

### UNIVERSITY OF MARYLAND - UNIVERSITY COLLEGE

BS in Computer Science  
May 2018 (Expected) | Adelphi, ST  
GPA: 4.0 / 4.0

### EAST CAROLINA UNIVERSITY

MA in History  
May 2014 | Greenville, NC  
GPA: 3.78 / 4.0

### EAST CAROLINA UNIVERSITY

BS in Applied Geography  
Dec 2007 | Greenville, NC  
Magna Cum Laude  
GPA: 3.73 / 4.0

## SKILLS

### PROFICIENT:

Java, Python, Go,  
Git, Maven, JUnit,  
TDD/Unit Testing,  
React, Node, Django,  
Heroku, HTML, CSS,  
Bootstrap, JSON, LaTeX,  
Linux

### FAMILIAR:

C++, Agile, MariaDB  
MongoDB, AWS lightsail,  
Shell Scripting

## COURSEWORK

Data Structures, Algorithms,  
Advanced Programming  
Languages, Operating Systems,  
Computer Systems Architecture,  
Linear Algebra, Discrete Math,  
Object Oriented and Concurrent  
Programming

## LINKS

🐙 [github.com/sanchagrins](https://github.com/sanchagrins)  
🌐 [linkedin.com/in/sanchagrins](https://linkedin.com/in/sanchagrins)  
🌐 [sanchagrins.github.io](https://sanchagrins.github.io)

## EXPERIENCE

### DEWBERRY, LLC | Geospatial Analyst (Python/Agile)

Aug 2013 – Sep 2014 | Fairfax, VA

- Restructured company hydrodynamic inundation model process by incorporating Python and spatial statistical libraries.
- Decreased model runtime through automation and optimization by roughly 50%.
- Delivered high value projects (\$150k+) on time and under budget.
- Published map services to cloud based hosting platforms.

### RENCI@ECU | Geospatial Analyst (Python)

May 2008 – Jun 2012 | Greenville, NC

- Developed complex geospatial models with Python and spatial statistical software of coastal processes.
- Analyzed model spatial resolution using a Monte Carlo simulation.
- Web development (HTML, CSS, JS).

## PROJECTS

### OKAMI CRYPTOCURRENCY TRACKER | Project Manager

React / Node.js / MariaDB / Heroku / Git

- Supervised 5-developer team.
- Designed application architecture and deployment strategy.

### GO NEURAL NET | Developer

Go / Git

- Implemented two-layer neural network.
- Utilized back-propagation for weight adjustment with Sigmoid activation function
- Developed a custom Linear Algebra library.

### DJANGO SLACK INVITE | Developer

Python / Django / Selenium / Heroku / Git

- A barebones Django app for automating the invite process for Slack.
- Easily deployable with integrated Heroku support.
- Designed utilizing Test Driven Design (TDD) and Selenium.
- Documentation created with Sphinx.

### JAVA GUI-COMPILER | Developer

Java Swing / Maven / JUnit / Git

- Custom parser and lexer developed for a BNF GUI grammar.
- Reads in a source file and builds custom Java Swing GUIs.
- Dependency resolution, unit testing and artifact creation handled with Maven.

### CS RESUME REDDIT BOT | Developer

Python / Tesseract / MongoDB / Git

- Reddit bot that scrapes a popular Computer Science sub-reddit for resumes.
- Resumes are preprocessed with a custom image filter and parsed with the open source Tesseract Optical Character Recognition Engine.
- Extracted data is stored in a MongoDB and analyzed using descriptive statistics.