# Stephen Sanchagrin

■ sanchagrins@gmail.com | ③ sanchagrins.github.io

## **EDUCATION**

## UNIVERSITY OF MARYLAND, UNIVERSITY COLLEGE

BS in Computer Science May 2018 (Expected) | Aldephi, MD GPA: 4.0 / 4.0

#### **EAST CAROLINA UNIVERSITY**

MA in Maritime 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, GIT, Django, HTML, CSS Bootstrap, JSON, LaTex

#### **FAMILIAR**

C, JavaScript, PostgreSQL MongoDB, Maven, Heroku

### LINKS

Github:// sanchagrins LinkedIn:// sanchagrins

## **EXPERIENCE**

## **DEWBERRY, LLC** | Geospatial Analyst

Aug 2013 - Sep 2014 | Fairfax, VA

- Utilized Python and spatial statistical software packages to create flexible hydrodynamic inundation models to aide in analysis of costal hazards and sea-level rise.
- Significantly decreased overall model runtime by automatic tasks with scripting.
- Personally developed and delivered a product valued at \$150k within a month long deadline, on time and under budget, utilizing the custom computer model.
- Published map services to web servers.

## **RENAISSANCE COMPUTING INSTITUTE** | Geospatial Analyst May 2008 – Jun 2012 | Greenville, NC

- Developed complex geospatial models of coastal processes.
- Analyzed model spatial resolution using a custom Monte Carlo simulation developed in python.

### **PROJECTS**

#### DJANGO SLACK INVITE | Python/Django/Heroku

- A customizable barebones Django app for automating the invite process for Slack.
- Easily deployable with integrated Heroku support.
- Designed utilizing Test Driven Design (TDD) with 81% coverage.
- Documentation created with Sphinx and hosted on readthedocs.io

#### **CS RESUME REDDIT BOT** | Python/Tesseract/MongoDB

- 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.

#### **BOUYCALC** | Java/Maven

- Makes request to NOAA National Buoy Data Center and retrieves information.
- Calculates descriptive statistics from buoy data.
- Dependency resolution and artifact creation handled with Maven.

## **PUBLICATIONS**

[1] Sanchagrin, Stephen. A View Through the Periscope: Advanced and Geospatial Visualizations of Naval Battlefields. Proquest LLC. 2014. Ann Arbor MI.

[2] Allen, Thomas, Stephen Sanchagrin, and George McLeod. Visualization for Hurricane Storm Surge Risk Awareness and Emergency Communication, Approaches to Disaster Management - Examining the Implications of Hazards, Emergencies and Disasters. John Tiefenbacher. 2013.