ROQUE SOTO

COMPUTER SCIENTIST

Address 1500 Locust St. Apt. #2306, Philadelphia, PA, 19102
Phone: (561) 859-4737
E-mail: roquealbertosoto@gmail.com
LinkedIn: www.linkedin.com/in/roque-soto-castaneda
Github: github.com/roqueasoto

MY STORY

I'm a computer science student with a background in geology and physics. My passion is in developing innovative software that pushes the limits of my skills further. In particular, I enjoy designing solutions that fit the needs of the client or user while simultaneously being simple to operate, maintain and understand. I am in the process of continuing my computer science education and hope to work in software engineering on a range of topics from big data solutions to user design and task optimization.

PERSONAL

Age // 25 years

Nationality // American

Driver's License // Yes

SKILLS

- MATLAB
- Python
- Java
- Ocaml
- Science Comm.
- Microsoft Excel
- Javascript
- MySQL
- HTML & CSS

LANGUAGES

- English
- Spanish
- French
- Chinese
- Japanese

PROJECTS

April 2019 - Present
Climate Change Visualizer (In Progress) - Java

DESCRIPTION:
- Leading project team as implementation & design lead.
- Implemented geocoding (user input of street address to get lat & lon) via OpenStreetMap and with gson JSON parser
- Applied Spring Boot micro service framework to deploy app online, with Thymeleaf & Bootstrap 4 for Front-end

Aug 2018 - Present
Receipt Scanner (In Progress) - Python 3

DESCRIPTION:
- Developing a photo-to-document receipt scanner to track, archive, & organize business expenses efficiently
- Implemented with OpenCV computer vision library for photo-to-document conversion

Mar 2018 - May 2018
Ocamon! : Poke-Battle Game - OCaml

DESCRIPTION:
- A 4-person team final project to develop a game w/ the Model View Controller architecture & using Github
- Main responsibilities included leading the design of the game & implementing a Gamma Pruning AI algorithm

Oct 2017 - Nov 2017
Navigation for a Graph Traversing Spaceship - Java

DESCRIPTION:
- Built the navigation for a spaceship simulation.
- First implemented a depth-first search to find the target
- Then a shortest path traversal w/ added constraints

EXPERIENCE

Oct 2018 - Present
Geologist 1 - Arcadis

RESPONSIBILITIES:
- Collect, manage, & analyse soil, water & vapor data w/ Excel
- Prepare reports & figures for internal & client presentation
- Oversight, communication, & resolution of field operations
- Technical & admin. support for the Digital Solutions group

Aug 2016 - July 2018
Graduate Research Assistant - Cornell University

RESPONSIBILITIES:
- Compile & manage seismic database for 403 earthquakes at 254 seismometers w/ Antelope Env. Monitoring Software
- Create & integrate scripts for quality control, filtering, analysis & plotting of seismic data in MATLAB

Nov 2013 - May 2016
Undergraduate Research Assistant - Brown University

RESPONSIBILITIES:
- Build a mathematical model of the temperature and stress evolution of continental lithosphere over time in MATLAB
- Develop MATLAB scripts to measure seismic velocity w/ a novel method of relating temporally & spatially disjoint data

EDUCATION

Jan 2019 - May 2021
M.S. Computer & Information Tech. (Planned) U. Penn.

MASTER'S CLASSES:
Intro to Software Development - Object-Oriented course in Java w/ assignments on Data Science analysis w/ real-world data, spell-checker, & climate visualization group project

Aug 2016 - May 2019
M.S. Geophysics (Planned) Cornell University

MASTER'S THESIS:
"Seismic attenuation analysis of subduction zone volcanism in south-central Alaska." With Dr. Geoffrey Abers

Sep 2012 - May 2016
B.S. (Hons) Geology: Physics & Math Brown University

HONORS THESIS:
"Imaging Rayleigh wave phase velocity beneath USArray using a Two-Station Method." With Dr. Colleen Dalton

AWARDS

Undergraduate Teaching Research Award (UTRA)
2014 & 2015
Brown University

Induction to the Scientific Honor Society Sigma Xi
2016
Brown University

Deans Excellence Fellowship
2016
Cornell University

INTERESTS

Volleyball // Cooking // Video Games // Cartography // Dungeons and Dragons