Lucas A. Estrada

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Education

Williams College 2015-December 2019
Bachelor of Arts in Geoscience and Computer Science
Varsity Cross Country and Track
Dean's List 2019

Middlesex School 2011-2015
Science Department Prize in Environmental Science

Relevant Experience

Software Engineer, Nevo Technologies 2020-present
- Worked as part of a high velocity agile development team on a wide variety of projects
- Gained experience in web/mobile app development and AWS ecosystem
- Quickly adapted to new technologies, stacks, and development environments
- Implemented ETL processes for high volume data processing project

Research Intern, Incorporated Research Institutions for Seismology Summer 2019
Supervised by Dr. Kasey Aderhold
- Conducted novel seismic research studying Alaskan Sea Ice modulations of seismic noise
- Performed statistical analyses of seismic data in Matlab and Python
- Presented research at American Geophysical Union conference 2019
- Wrote scripts that pull data in real time directly from Alaskan Transportable Arrays api

Research Assistant, Cohen Lab - Williams College Summer 2018
Supervised by Dr. Phoebe Cohen
- Studied the microfossil and mercury content of Devonian Shales to investigate the End-Devonian mass extinction
- Prepared samples for analysis and recorded detailed notes of results and procedures
- Presented research at the Geological Society of America's 2018 Conference in Indianapolis
- Wrote Python scripts to analyze datasets from the Macrostrat and Paleobio Database API

Crew, Appalachian Mountain Club Cold River Camp - Chatham, NH Summer 2017
- Lived and worked with colleagues in a team-oriented, fast-paced environment
- Maintained all buildings and grounds; Served on waitstaff and ensured guest satisfaction

Intern, Weston Geophysical – Lexington, MA Summer 2015
- Analyzed global seismic activity using company software in a Linux environment
- Setup and Prepared equipment for offsite seismic studies

Technical Skills

Programming
Python, Java, TypeScript, C/C#/C++, Matlab, SQL/PSQL, Docker, AWS, Terraform, Linux, Object Oriented Programming, Unit Testing, Debugging, Version Control (Git), Bitbucket Pipelines, SQL/PSQL

Frameworks
Angular, .NET Core, React Native, Xamarin Forms

Software
ArcGIS, InDesign, Microsoft Suite

Service and Leadership

Purple Bike Coalition President, Treasurer, Mechanic 2016-2019
- Manage shop budget, train and hire mechanics, organize work schedules

Teaching Assistant - Geoscience 101, Williams College 2019
- Assist 30+ students in labs and answer questions related to lectures and course materials
- Review and grade student labs

Track Captain, Williams College 2018-2019

- Organize team events, promote positive culture, communicate with coaches

Projects and Research

Acushnet Artworks 2021

Worked as part of a small development team to implement a logo management web application for the Acushnet Holdings Corporation. This project utilized Angular for the front end application and .NET Core for the backend. This project was deployed and run with an entirely serverless footprint using AWS ECS to run a dockerized version of the application. I was heavily involved in standing up the necessary devOps infrastructure and coding both the client-side and server-side applications

IHM Insights 2020

Developed a high volume, cloud-based medical data ingest and egress system for the Institute for Health Metrics. I worked as one the sole contributors handling the ingestion and transformation of EHR data from over 50 hospitals into our canonical persistence store on the cloud. This project involved leveraging a wide variety of AWS services including AWS Glue (Pyspark), Lambda, Step Functions, RDS Aurora, ECS, etc.

J&J JLabs Navigator 2020

Developed a web application for Johnson & Johnson's incubator program (JLABS). Worked on the client-side application to replace their legacy Drupal application with a new Angular version that provides richer interactions and visualizations.

Seismic Data Tools 2019

Programmed tools in Matlab and Python to fetch and analyze seismic noise from IRIS data center

Paleontology Scripting Analysis Summer 2018

Wrote Python scripts to interact and analyze data from Macrostrat and the Paleobio Database API's

Roguelike Game Development Winter 2017

Implemented and developed JavaScript rogue-like video game

Characterizing Sea Ice Modulations of Seismic Noise using the Alaskan Transportable Array
Publication in Submission; https://agu.confex.com/agu/fm19/meetingapp.cgi/Paper/507588

Mercury and Microfossil Trends During End-Devonian Extinction Events
Publication pending; https://www.researchgate.net/scientific-contributions/Lucas-Estrada-2150491930