CHRISTOPHER PAUL ROSS

Software & Data Engineer

Seattle, WA cpross90 in ChristopherPaulRoss

PROJECTS

Financial Statistics App

Jan 2021 – Present

- Working with peers in the Microsoft Software & Systems Academy we built a central API that loads live stock and cryptocurrency data into a MySQL database for analysis
- Scaffolded application web API, data models, SQL queries, and unit testing in C# .NET Core, and plan on a deployment to Azure after application exits development and testing phase

El Centro de la Raza & Real Change

Apr 2020 – June 2020

- Worked with our community partners to make hypotheses and analyze data for various programs that help minority and community members without access to traditional employment opportunities
- Processed 15k data entries, produced visualizations and models constructed with logistic regression, linear discriminant analysis, quadratic discriminant analysis, KNN, and dimensionality reduction methods

Cumulative Class Project for Machine Learning

Jan 2019 – Mar 2019

- Cleaned and reduced data set of 100k matches down to 80k, from an online multiplayer dataset, to group matches by team compositions and country of origin to predict win/loss outcomes and/or percentages
- We compared logistic regression, KNN, neural network, and random forest models to predict win/loss percentages based on team compositions and country of origin in Python with scikit-learn

Senior Capstone Project with PACCAR

Sep 2018 – June 2019

- Created a Vue.JS frontend and a C# .NET Core backend solution to interface with a MySQL database for documenting, indexing, and retrieving critical business knowledge for enforcing company best practices
- Designed and coded the UI, initial Azure deployment, coordinated and executed the Azure-to-AWS migration, and created the CI/CD pipeline in Azure and AWS.

EXPERIENCE

Undergraduate Research Assistant

Mathematics Department, Seattle University

June 2018 – June 2020   Seattle, WA

- Leveraged multidimensional unconstrained optimization algorithms such as Newton's method, (L)BFGS, and gradient descent to locate trivial and nontrivial water wave solutions periodic in space and time
- Implemented algorithm for computing, validating, and analyzing nontrivial time-periodic solutions in Julia

Airborne Mission Systems Specialist

1st Airborne Command Control Squadron, United States Air Force

Oct 2009 – Feb 2015   Offutt AFB, NE

- Operations division lead for 24/7/365 equipment functionality for a fleet of four 747 Nuclear Command and Control aircraft in support of President, Secretary of Defense, and Chairman of the Joint Chiefs of Staff
- Designed new workflows for day-to-day operations to improve task creation, task completion, and notifying customers and adjacent agencies of resolution of tasks assigned to the 1st ACCS Operations department

SUMMARY

Recent college graduate and Air Force veteran committed to learning and integrating new technologies. Deeply invested in personal and team growth with an established record of collaborating across functional teams. Adept in contributing to strategic planning and execution, ensuring business goals and customer needs are met.

EDUCATION

Microsoft Software & Systems Academy

Jan 2021 – May 2021

B.S., Computer Science
B.S., Applied Mathematics
Seattle University

Sep 2017 – June 2020

SKILLS

Programming Languages

`Julia` `C++` `Python` `C#`
`SQL` `Mathematica`

●●●●○

`Java` `R` `Rust` `Go`
`JavaScript` `bash` `MATLAB`

●●●○○

DevOps

`Docker` `CI/CD` `Unit Testing`
`Git` `Azure` `AWS`

Hobbies

`Ambilight` `PiHole` `VR`
`VPN` `Router Hardening`
`Vulnerability Scans` `Smart Mirror`
`Gaming` `Water Wave Research`
`Reading` `Running` `Hiking`
`Security+` `Azure Fundamentals`