

CHRISTOPHER PAUL ROSS

Software & Data Engineer

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PROJECTS

Financial Statistics App (C# .NET Core, MySQL, Vue.JS)

📅 Jan 2021 – Present

- Designed and coded a central API that loads live stock and cryptocurrency data into a MySQL database for analysis based on linear and/or statistical methods while attending Microsoft Software & Systems Academy
- Worked with teammate to scaffold C# .NET Core web API, data models, SQL queries, unit testing, DevOps, and user interfaces; plan on a deployment to Azure after application exits development and testing phase

El Centro de la Raza & Real Change (R, dplyr, ggplot2, RColorBrewer)

📅 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 with R

Cumulative Class Project for Machine Learning (Python, NumPy, Matplotlib, Sci-kitLearn)

📅 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
- Analyzed performance of 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 (C# .NET Core, Vue.JS, Elastic, Azure, AWS)

📅 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
- Contributed to UI, Azure deployment, coordinated and executed the Azure-to-AWS migration, and created the CI/CD pipeline in Azure and AWS; worked with follow-on intern to write unit testing and deployment

EXPERIENCE

Undergraduate Research Assistant (Julia, Plotly.JS, DifferentialEquations.jl, Optim.jl, Flux.jl)

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 a fleet of four 747 Nuclear Command and Control aircraft ensuring 24/7/365 equipment uptime 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, completion, and notification of customers and adjacent agencies for status updates pertinent 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 AI
ML VPN Router Hardening
Vulnerability Scans Smart Mirror
Gaming Water Wave Research
Reading Running Hiking
Security+ Azure Fundamentals