Srikar Vootkur

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 github | linkedin

EDUCATION

Bachelor of Science - Mathematics (Minor in Computer Science)   **Sep 2017 - May 2021**

University of Wisconsin-Madison (GPA: 3.33)   *Madison, WI*

Continuing Education   **Jan 2022 - June 2022**

University of California - Irvine   *Irvine, CA (In-Person)*

  - MATH 205B - Introduction to Graduate Analysis

  - COMPSCI 179 - Algorithms for Probabilistic and Deterministic Graphical Models

Continuing Education - Mathematics   **Jan 2024 - Present**

Johns Hopkins University (GPA: 4.0)   *Baltimore, MD (Remote)*

  - 110.412 - Honors Astract Algebra II (Grade: A+)

  - 110.413 - Introduction to Topology (Grade: In-Progress)

SKILLS

Programming Languages	Python | C++ | Java | R
Technologies	Pandas, Scikit-Learn, PyTorch, Tableau, Apache Spark

EXPERIENCE

Pacific Life   **June 2021 - Aug 2023**

Predictive Data Analytics Analyst   *Newport Beach, CA*

- Managed the Fixed Index Annuity products for the Retirement Solutions Division, including: proposing bi-weekly rate updates, forecasting profitability using linear regression, and presenting to Pricing Team directors in a Tableau dashboard
- Led a project to transition the calculation of monthly returns from Excel to Python to eliminate human error and save about ten hours each month, entailed creating an object-oriented program with the help of two team members
- Implemented an automated Python-based options pricing tool using the Black-Scholes formula to calculate index call option prices monthly
- Developed an ETL pipeline to update Renewal Rates in Snowflake, which was used by the marketing, product, and sales teams

Pacific Life   **May 2020 - Apr 2021**

Actuarial Intern   *Newport Beach, CA (Remote)*

- Created an illustration tool for the Fixed Index Annuity hedging model
- Translated an Implied Volatility model from C# to Python to allow for modularity and transparency

Department of IT, UW-Madison   **Aug 2019 - May 2020**

EBS/ERP Student Analyst   *Madison, WI*

- Performed software testing to verify additions and patches for the main Human Resource databases
- On-boarded new students to the functionality of the databases and the main daily operations

TAI Diagnostics   **Jan 2018 - Aug 2018**

Data Science Intern   *Wauwatosa, WI*

- Improved the threshold estimate for the ratio of donor DNA in a non-invasive heart transplant rejection test by analyzing and performing linear regression on LightCycler data in R
- Created an Excel tool to assist nurses and lab technicians in clinical trials of gathering DNA data from blood samples with a LightCycler

PROJECTS

Breast Cancer Classification   **Sep 2024**

- Performed EDA on the Breast Cancer Wisconsin dataset and built a neural network from scratch using object-oriented principles to obtain a 98% accuracy in identifying whether a tumor was malignant or benign.

NBA Scoring Prediction Model   **Oct 2024**

- Built a Gradient Boost model from scratch to predict points scored by a player in upcoming games
- Developed a dynamic front-end for the app that is hosted using Streamlit cloud