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EDUCATION

B.S. Computer Science with Data Science

University of Washington – September 2019 to June 2023 (expected)   GPA: 3.62

Skills: Computer Vision, Deep Learning, Algorithms, Data Visualization, Testing   Java, Python, R, SQL, C++

WORK EXPERIENCE

Data Engineering and Solution Area Intern | Avanade (Seattle)   June 2022 – Aug 2022
- Validated ML for 10x faster utility pole care. 1000 images taken, tagged, trained. Improved 50% metrics to 70%.
- Wrote SQL for client-facing IaaS/PaaS price comparison webapp. Practiced Azure DevOps, agile methodology.
- Created, pitched AI metaverse project for FUEL Hackathon. Earned top NA AI project (230 participants). Led knowledge transfer to Growth Office leadership.

Undergraduate Research Assistant | Computer Vision Physiological Signal Detection (UW)   Dec 2021 – June 2022
- Augmented subject videos to achieve lower Mean Average Error on pulse and respiration MTTS-CAN predictions.
- Wrote Python code to apply linear and nonlinear lighting augmentation to UBFC dataset, ran ~50 experiments.
- Achieved 8.6x lower MAE on subjects with skin tones underrepresented in the data using gamma correction.
- Evaluated results and attention masks, presented findings to stakeholders (UW Postdoc, Microsoft Research).

Foundations of Computing Teaching Assistant | Paul G. Allen School of Computer Science   Sept 2021 – Dec 2021
- Created and presented weekly lessons for CSE 311 Foundations of Computing, provided TAs with lessons.
- Taught 27+ students formal logic, induction, set theory, regular expressions, and Turing machines.
- For 2+ hours weekly, assisted up to 11 students at a time by adapting concept explanations to their needs.

Natural Language Generation Intern | Unscrambl   July 2021 – Oct 2021
- Studied Natural Language Generation (NLG) techniques using Stanford materials and WebNLG papers with code.
- Tested and upgraded three NLG repositories using Docker, Linux, and Tensorflow docs. Trained NLG models.
- Generate text summaries of data in a corporate setting; presented methods to Chief AI Officer.

Machine Learning Teaching Assistant | Paul G. Allen School of Computer Science   March 2021 – June 2021
- Created and presented weekly lessons for CSE 416 Introduction to Machine Learning, provided TAs with lessons.
- Taught 20+ students using Python libraries such as PyTorch, Pandas and Scikit-Learn for data and deep learning.
- Introduced students to graphical inference, networks, and singular value decomposition applications.
- Developed coding worksheets to teach neural networks, regularization, performance metrics, and model equity.

TECHNICAL EXPERIENCE

RigMonkey Data Science | Founded Startup   Feb 2021 – Dec 2021
- With 3 cofounders, used Pitchbook market data and 40+ user research interviews to validate our business.
- Implemented the algorithm matching PC builds to user requests, minimizing 7-dimensional weighted distance.
- Created R webscraping scripts to fetch cheapest PC Parts within parameters, automating build creation process.

Nontransitive Dice R Package | Personal Project   Aug 2021
- Created and published a statistical package for simulating nontransitive dice in R (called "ntdice").
- Practiced workflow of iteratively modifying code and testing the package until all tests are passed.
- Added documentation and code coverage checks to the GitHub repository (github.com/andreyrisukhin).

Networks & Choice Ranking | Statistics & Probability Association   March 2021 - June 2021
- Implemented graph ranking models such as PageRank, SpringRank to infer faculty hiring across institutions.
- Studied utility and choice-making models for networks through 1:1 PhD student-directed reading.
- Presented report comparing the models' performance, using Python to compute and visualize models.