Andrey Risukhin

andrey.risukhin@outlook.com 425-443-0993 linkedin.com/in/andreyrisukhin github.com/andreyrisukhin

EDUCATION

University of Washington

Graduation Dec 2023

B.S. Computer Science with Data Science

GPA: 3.62

Skills: Deep Learning Research, Data Visualization, Testing, User-Centered Design

Python, Java, R, SQL, C++

WORK EXPERIENCE

Noah's ARK Natural Language Processing Lab (UW)

Sep 2022 – Present

Undergraduate Research Assistant

- Implemented efficient transformer attention methods using einsum and PyTorch into Fairseg repository for evaluation
- Presented monthly at weekly lab meetings, leading discussion of contemporary methods relevant to NLP

Avanade Jun 2022 – Aug 2022

Data Engineering and Solution Area Intern

- Trained 10x faster utility pole care models on Azure Cognitive Services. Increased 50% accuracy to 70%
- Wrote SQL for client-facing laaS/PaaS price comparison webapp. Practiced Azure DevOps, agile methodology
- Created, pitched AI metaverse project for internal FUEL Hackathon. Earned top NA AI project (230 participants)

Computer Vision Physiological Signal Detection (UW)

Dec 2021 – Jun 2022

Undergraduate Research Assistant

- 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

Unscrambl Jul 2021 – Oct 2021

Natural Language Generation Intern

- Implemented WebNLG papers, Stanford NLG course to generate text summaries of data in a corporate setting
- Tested and upgraded three NLG repositories using Docker, Linux, and Tensorflow docs. Trained NLG models

Paul G. Allen School of Computer Science

Mar 2021 - Jun 2021

Machine Learning Teaching Assistant

- Created, presented weekly lessons for CSE 416 Introduction to Machine Learning, provided TAs with lessons
- Taught 20+ students machine learning with 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 Scientist | 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 pairing PC builds to 100 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, published a statistical package for simulating nontransitive dice in R (called "ntdice"), with code coverage
- Practiced workflow of iteratively modifying code and testing the package until all tests are passed

Networks & Choice Ranking | Statistics & Probability Association

Mar 2021 - Jun 2021

- Implemented graph ranking models: MultiLogit, 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 to peers, comparing the models' performance, using Python to compute and visualize models