Austin Okray

✉ *aokray@uwyo.edu, arokray@gmail.com*
austinokray.xyz

Education

2014 - 2020 **University of Wyoming**.
B.S. in Computer Science
- Minors in Mathematics and Statistics

Research and Work Experience

2018 - **Undergraduate Research Assistant**
University of Wyoming Computer Science Department, Laramie, WY
- Advisor: Dr. Chao Lan
- Topics: fair machine learning, kernel methods, multi-view learning, anomaly detection

2019 - **Research Intern**
Teton Simulation Software, Laramie, WY
- Supervisor: Dr. Jeff Selden
- Task: utilizing machine learning methods and optimization techniques to solve problems related to optimizing 3D printed parts.

2017 - 2019 **Database Developer**
University of Wyoming IT, Laramie, WY
- Supervisors: Julie Schroyer, Mike Kundert, Sean McConnell
- Tasks: developed and maintained applications that implemented desired business logic, utilized R and Python to deliver critical application usage information to clients.

Publications

[1] **A. Okray**, H. Hu, C. Lan, "Fair Kernel Regression via Fair Feature Embedding in Kernel Space", In: *International Conference on Tools in Artificial Intelligence*. 2019.

[2] Z. Wang, S. Muknahallipatna, M. Fan, **A. Okray**, C. Lan, "Music Classification using an Improved CRNN with Multi-Directional Spatial Dependencies in Both Time and Frequency Dimensions", In: *International Joint Conference on Neural Networks*. 2019.

Fellowships and Awards

2019 **University of Wyoming Engineering Fund for Enrichment Award Recipient**.

Fall 2018 **Dean's Honor Roll**.

Professional Activities and Mentorship

Co-Reviewer IEEE Big Data 2019, ICBK 2019

Session Chair IJCNN Applications of deep networks session

Student Mentor Mentor for undergraduate student group researching Educational Data Mining for a course project

Oral Presentations

Nov 2019 Fair Kernel Regression via Fair Feature Embedding in Kernel Space

- At ICTAI 2019. Portland, Oregon.

July 2019 Music Classification using an Improved CRNN with Multi-Directional Spatial Dependencies in Both Time and Frequency Dimensions

- At IJCNN 2019. Budapest, Hungary.

Teaching Experience

Fall 2019 **Teaching Assistant**, *COSC4550: Introduction to Artificial Intelligence*, UWyo.

- Tasks: grading, preparing and giving tutorials on LaTeX and the basics of machine learning in Sci-kit Learn and TensorFlow

Course Projects

Spring 2018 **Using Heuristic Weighted k-NN for NBA Game Prediction**

COSC4555: Machine Learning

Dr. Chao Lan, Department of Computer Science

Spring 2019 **Investing for Low-Income Investors with Managed Risk as a Convex Optimization Problem**

EE5490: Convex Optimization

Dr. John McInroy, Department of Electrical Engineering

Fall 2019 **Fairness for All: A website to educate non-technical audiences on Fair ML**

COSC4010: Independent Study

Dr. Chao Lan, Department of Computer Science

Computer Skills

Programming Python, R, SQL, C++, Java, Groovy

Libraries Sci-kit Learn, NumPy, Matplotlib

Other Interests

Photography, mountain biking, paleontology, strategy games