# Conner Flansburg

# Computer skills

Systems Quantum Computing, High Performance Computing, Linux, Machine Learning

Languages Python, Golang, Bash, Java, C/C++, C#

Development Object Oriented Programming, Git, Agile, Waterfall

Office LATEX, Word, PowerPoint, Excel

#### Education

2021 **Computer Science**, *University of Oklahoma*, Norman.

Bachelor of Science

2017 Computer Information Systems, Tulsa Community College, Tulsa.

Associate in Science

### Publications

2022 Wind Prediction under Random Data Corruption, 36th AAAI Conference.

Conner Flansburg and Dimitrios I. Diochnos

#### Keywords.

- Training-Time Attacks
- Data Corruption
- Robustness

- o Lasso Regression
- Ridge Regression
- Neural Network

## Research

2022-Present **Software Engineer I**, Pacific Northwest National Laboratory.

Worked inside of the Research Computing (RC) directorate & assisted labs with the use of RC resources such as the labś supercomputers. I also assisted labs working in Quantum Computing with their computer science needs.

- Presentations
- Scientific Writing
- Conferences
- Posters

- Mentorship
- o Ethics in Research
- Regression
- Double Descent

2022-Present Post Bachelors Research Assistant, Pacific Northwest National Laboratory.

Worked inside of the Research Computing (RC) directorate & assisted labs with the use of RC resources such as the labś supercomputers. I also assisted labs working in Quantum Computing with their computer science needs.

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## 2020–2021 Research Assistant, University of Oklahoma, Norman, OK.

Worked directly with Dr. Diochnos on research involving genetic programming. The primary goal of our work was to use class dependent feature construction to address the problem of over-fitting in decision trees. The process of feature construction was achieved using a genetic programming approach, and the majority of our code was written in Python.

- Decision Trees
- Genetic Algorithms
- o Genetic Programming:
  - Distance Functions & Calculation
  - Fitness Functions & Calculation
- Rare Event Prediction
- Recall
- Precision
- Machine Learning
- Poisoning Attacks

## 2021 Undergraduate, Research Experiences for Undergraduates, Norman, OK.

Offered by the National Weather Center, and funded by the National Science Foundation through Al2ES, the program was a structured introduction to research for undergraduates. The goal of the program was to provide mentorship, and experience in the realities of research work. My work focused on regression and problems similar to double descent.

- Presentations
- Scientific Writing
- Conferences
- Posters

- Mentorship
- o Ethics in Research
- Regression
- Double Descent

# Experience

#### Vocational

2014–2015 Library Aide, Tulsa Community College, Tulsa, OK.

Worked at the front desk, answered phones, sorted mail, entered electronic records & files, answered patron's questions, and maintain organization in the library.

#### Academic

2014 **Speaker**, Great Plains Honors Council Conference.

Gave presentation entitled "The Quantum Revolution" about the theory behind quantum computation & its' possible implications on the future of security for an audience of interested nonprofessionals.

- 2014–2015 **President**, Alpha Mu lota chapter of Phi Theta Kappa, Tulsa Community College. Served as a delegate for the Tulsa Community College chapter of the Phi Theta Kappa honor society at their international conference (April 2015), organized academic events, planned research projects, and oversaw meetings.
- 2014–2015 **Vice President**, *Student Government Association*, Tulsa Community College. Served as a delegate for college at the state level, passed legislation, helped decide funding for student organizations, oversaw meetings, and performed other duties as requested by the president.
- 2013–2015 **President & Founder**, *Student Historical Society*, Tulsa Community College. Founded organization, recruited members, authored governing documents, organized academic & recreational events, submitted budget proposals, created promotional materials, and oversaw meetings.