

Zach Sahlin

📞 206-607-7655 • ✉ zach@sahlins.net • 🌐 GoneSahlin • in zach-sahlin

EDUCATION

Gonzaga University | Spokane, WA

August 2019 – May 2023

BS in Computer Science, Minor in Applied Mathematics

- Graduated Magna Cum Laude
- President's List: 3 semesters, Dean's List: 4 semesters

PROJECTS

Machine Learning for Real Estate 🌐 | Python, SQL, PyTorch, JS, Fast API

Fall 2022 - Spring 2023

- Senior Design Project
- Collects data on historical rental prices, crime data, and school scores.
- Predicts future rental prices with an LSTM.
- Leverages a REST API to connect the web app to the MySQL database.
- Displays historical prices and predictions as a web app.

Stock Predictor 🌐 | Python, TensorFlow, AWS Lambda, AWS EventBridge, selenium

Spring 2023

- Collects historical and current data from various sources using APIs and web scraping.
- Stores and retrieves data on AWS S3.
- Uses an LSTM to predict weekly percentage increase.
- Displays predictions on a web app.
- Utilizes GitHub Actions for a CI/CD pipeline to test and publish to AWS Lambda.

Image Resizing CDN 🌐 | Python, AWS CloudFront, AWS Lambda, AWS S3, AWS CDK

Fall 2023

- Automatically resizes, reformats, and caches images using AWS Lambda and AWS CloudFront.
- Uses AWS CDK to deploy the stack.

RESEARCH

Long Span Truss Analysis and Optimization 🌐 | MATLAB

Spring 2023

- Worked with Dr. Sara Ganzerli and civil engineering students.
- Developed a script to analyze and optimize a truss to minimize material use within the load constraints.

WORK EXPERIENCE

Teaching Assistant | Gonzaga University

August 2022 – May 2023

- Teaching assistant for Operating Systems, Computer Security, and Internet of Things.
- Graded programming and written assignments.

Online Private Instructor | iD Tech

June 2021 – August 2022

- Tutored in 8 different computer science topics, including C++, Java, and Python.
- Completed over 200 private lessons.
- Formed relationships with long-term clients, and developed further skills in communication and coding.
- Collaborated with other instructors to improve teaching methods.

RELATED COURSEWORK

- Algorithms & Abstract Data Structures
- Machine Learning & Intelligent Systems
- Data Science Algorithms
- Operating Systems
- Database Management Systems
- Programming Languages & Compilers
- Linux & DevOps
- Natural Language Processing

TECHNICAL SKILLS

- Languages: C++, Java, Python, C, SQL
- Tools: Git, Linux, Docker, Jupyter, GitHub Actions, Postgres, AWS Lambda, AWS S3
- Libraries: TensorFlow, PyTorch, pandas, NumPy, scikit-learn, Matplotlib