CAMILLE ZAUG

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EDUCATION

Ph.D. Applied Mathematics
University of Washington

Fall 2020 - Present | Seattle, WA

GPA: 3.93 | Focus: Data science | Expected graduation: 2025

Select Coursework:

- AMATH 584: Applied linear algebra and intro to numerical analysis
- AMATH 563: Inferring structure of complex systems

B.S. Mathematics, Chinese Minor
B.A. Physics
Seattle University

Fall 2016 - Spring 2020 | Seattle, WA

Summa cum laude | GPA: 4.0 | Alpha Sigma Nu | Sigma Pi Sigma

Select Coursework:

- MATH 3910: Statistical modeling
- MATH 3450: Introduction to numerical methods

RELEVANT WORK EXPERIENCE

Software Engineering and Development Intern
Creative Creek

Summer 2020 | Remote

- Developed software in Python and C++ to import XML-formatted data from financial documents into accounting application
- Utilized object-oriented design to parse file descriptions, promote file compatibility, and extract information from bank statements
- Interfaced database with application and wrote SQL queries to import data, perform quantitative analysis, and generate reports

Computer Science Summer Immersion Program Instructor
Girls Who Code

Summer 2020 | Remote

- Taught HTML, CSS, and JavaScript through project-based learning to approximately 180 high school girls in 6 virtual sessions to inspire a love of coding and spark a lasting interest in computer science
- Managed a team of 3-4 teaching assistants to build interactive coding demos to teach web development and best practices
- Provided 30+ hours of one-on-one mentorship to students modeling pair programming, program design, and debugging tools/techniques

Mathematics Research Assistant
Seattle University

2018-2020 | Seattle, WA

- Leveraged Azure cloud computing and Python to perform 50+ hours of simulation modeling surface waves across the Pacific Ocean
- Used real-world wave data to determine which numerically implemented nonlinear models accurately describe swell evolution
- Communicated results to scientific community at professional conferences, gave invited talk at the University of Washington (2019)

SELECT PROJECTS

Portfolio Website
Designed, created, and deployed a personal interactive resume using Vue.js, HTML, CSS, and JavaScript

Housing Prices Competition
Implemented statistical modeling and machine learning techniques in R to predict housing prices for Kaggle competition

Timbre Synthesizer
Built a program and GUI with an object-oriented framework in Python to allow users to create musical tones and experiment with the sound and timbre

LANGUAGES

Programming Languages

Proficient

Python | MATLAB

Experienced

C++ | SQL | JavaScript | HTML | CSS | R | Julia

Spoken Languages

Mandarin Chinese | Spanish

AWARDS

President's Award, 2020
Highest academic award at Seattle University. Given to one graduating senior who maintained the highest grade point average throughout their undergraduate degree

Best Poster Award, 2019
Society of Industrial and Applied Mathematicians Pacific Northwest Sectional Meeting, October

Bannan Scholar, 2018-2020
Two-year scholarship and service program for STEM students with a GPA of 3.5 or higher and a demonstrated commitment to service

PUBLICATIONS

C. R. Zaug and J. D. Carter, "Dissipative models of swell propagation across the Pacific," *Submitted to Studies in Applied Mathematics*, 2020.

N. Pelle, L. Ehinger, C. R. Zaug, and W. J. Kim, "An autocollimator with sub-microradian sensitivity," *American Journal of Physics*, 2020.