SOPHIA BARBER

University of Washington, Seattle: Graduate Student

Email: sbarber990@outlook.com (personal), sophiab3@uw.edu (academic)

Phone: 425.998.3499

Education

University of Washington, Seattle

B.S. in Applied Mathematics; Mathematics (double major), *Magna Cum Laude*

Graduated June 2025

GPA: 3.98/4.00

M.S. in Applied Mathematics, *In Progress*

Expected Graduation: June 2026

Current GPA: 3.93/4.00

Relevant Coursework

Degree Courses (B.S. and M.S.):

- Scientific Computing, Data Analysis (including numerical techniques for differential equations, spectral analysis, filtering methods, principal component analysis, orthogonal mode decomposition, and image processing/compression)
- Probability and Stochastic Processes
- Linear Algebra (Theoretical and Numerical), Numerical Analysis
- Complex Analysis, Real Analysis
- Multivariable and Vector Calculus
- Number Theory
- Ordinary Differential Equations, Partial Different Equations, Waves
- Dynamical Systems & Chaos
- Computational Modeling (Continuous and Discrete), including ordinary differential equation models and some stochastic models

Other:

- Philosophy (logic, reasoning, ethics, philosophical issues in law)
- Mathematical Reasoning/Proof Writing

Work Experience

Graduate Teaching Assistant — September 2025 - June 2026

University of Washington Department of Applied Mathematics

Courses:

AMATH 352: Applied Linear Algebra and Numerical Analysis (Autumn 2025)
AMATH 351: Intro to Differential Equations and Applications (Winter 2026)

Held office hours weekly to assist students with questions about course content and homework problems; graded and provided feedback on homework assignments for 130 students every other week; wrote solutions to homework assignments; helped professors to proctor and grade exams.

SOPHIA BARBER

University of Washington, Seattle: Graduate Student

Email: sbarber990@outlook.com (personal), sophiab3@uw.edu (academic)

Phone: 425.998.3499

Programming Skills

Python, MATLAB, Java, LaTeX

Experience with basic supervised Neural Networks, including Fully Connected Neural Networks (FCNs) and Convolutional Neural Networks (CNNs).

Microsoft Office Specialist (MOS) certification for Word, Excel, PowerPoint 2016

Honors

Award of Excellence
University of Washington Department of Mathematics - June 2025
Awarded based on academic record and faculty nominations

Languages

English (Native Speaker)
Norwegian (Advanced Beginner)
Japanese (Intermediate)
Latin (Intermediate)

Key Skills

Clear communicator, strong writing and presentation skills
Takes initiative, strong work ethic, well-organized
Enjoys collaborating and working with others
Strong analytical thinking and problem-solving skills

Memberships

Society for Industrial and Applied Mathematics (SIAM)
American Mathematical Society (AMS)

Other

American/Canadian Dual Citizen
Willing to relocate to anywhere in USA, Canada, UK, or Europe