

Saoirse (née Nico) Courts

Communicator • Educator • Mathematician • Data Scientist

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A warm and sociable mathematician and puzzle nerd with a burning desire to understand and analyze the symptoms of—and root causes for—global conflict and injustice. My years of experience teaching and performing research (from lit review to more creative aspects) and my compassion and empathy make me well-suited to finding, digesting, synthesizing, and delivering instruction in complicated or esoteric subjects. Sometimes I spend entire nights on Wikipedia binges using my custom dark mode CSS and I wear that as a badge of honor.

RELEVANT EXPERIENCE

Postdoctoral Researcher

June 2022 – Present

Howard Hughes Medical Institute

Matsen Group, Fred Hutch Cancer Center, Seattle, WA

Used statistical and machine learning models to gain insights into how DNA mutates in B-cells to make your immune system function.

NSIP PhD Intern (Machine Learning)

Summer 2020 – Summer 2021

Pacific Northwest National Laboratory, Seattle, WA

Applied machine learning techniques (borrowing heavily from my mathematical background for inspiration) to solve two problems from real-world projects.

Graduate Teaching Assistant & Course Instructor

Sept 2016 – June 2022

University of Washington, Seattle, WA

Taught and assisted with the instruction of math classes at all university levels, including delivering lectures and holding problem sessions.

Lead Teaching Assistant and Instructor

Summer 2016

SCS Noonan Scholars (previously South Central Scholars), Los Angeles, CA

Independently developed and delivered Calculus II/III content for gifted students from underprivileged backgrounds.

EDUCATION

Ph.D., Mathematics (Univ. Washington)

June 2022

Representations and Support for Bosonized Quantum Complete Intersections

M.S., Mathematics (Univ. Washington)

March 2020

Schur Duality and Strict Polynomial Functors

B.S., Mathematics (Univ. Southern California)

May 2016

A.S., Mathematics (Citrus College)

June 2013

LEADERSHIP & SERVICE

Team Co-Leader

September 2021

QSIDE Datathon4Justice, Online

Math Department Union Steward

Winter 2021 – Spring 2022

UAW Local 4121 – Postdocs & Grad Student Union

Volunteer Judge

June 2020 & 2021

UW Math Hour Olympiad, Seattle, WA

Graduate Student Representative

Summer 2019 – Spring 2020

University of Washington Math Dept., Seattle, WA

Co-organizer and Mentor

Autumn 2018 – Spring 2021

Washington Directed Reading Program, Seattle, WA