

ISABEL BARRIO SANCHEZ

University of Pittsburgh
Department of Mathematics
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EDUCATION

University of Pittsburgh.

Ph.D. in Mathematics

Ongoing, expected completion May 2026

Research area: Numerical Analysis and Scientific Computing.

Relevant Coursework: Numerical Solutions to PDEs, Numerical ODEs, Numerical Methods in Scientific Computing 1 and 2 (Including programming Lab using python), Computational Fluid Dynamics, PDE 1, Measure Theory, Functional and Complex Analysis.

West Virginia University Institute of Technology

2021

Bachelor of Science in Mathematics.

Cumulative GPA: 4.0/4.0.

Minors: Computer Science, Economics.

PROGRAMMING SKILLS

Fluent in Java (main language in my undergrad institution) and Python. I have am familiar with C++. Java, Python, C++, Matlab, FreeFem++, AMReX.

WORK EXPERIENCE

Teaching Assistant - University of Pittsburgh

2021-present

- Led recitations and held office hours for Calculus 1, Calculus 2, and Business Calculus.
- Was the main instructor for Business Calculus in Summer 2022.
- Graded upper-level undergraduate courses: Numerical Mathematical Analysis and Modeling in Applied Math.

Assistant for the Computer Science Department – WVU Tech

2018-2021

- Developed and led STEM camps and after-school programs for rural and high-poverty girls in Southern West Virginia. Presented my work at the 2020 ASEE Conference.
- Received grants from NCWIT to develop these programs.

RESEARCH

I will be starting research in Spring 2023 by doing a Directed Study with Dr. Catalin Trenchea and Dr. Rebecca Durst in heat transfer in high velocity turbines.