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Summary_

Current postdoctoral fellow in mathematics at The Ohio State University. 10 years experience in pure mathematics research, 3 years experience as mathematics professor. Sociable math geek with an inquisitive mind who enjoys abstract thinking and working on hard problems. Looking to pivot my trajectory to a rewarding career in data science. Enthusiastic to leverage machine learning to amplify my positive contributions to the world.

Skills.

Programming

PYTHON 202

- · Python: 500 lines, 1 month experience
- Implemented solutions to machine learning exercises using numpy, scipy, and pandas

Java 2005 – 2006

- 5000+ lines code
- Coursework (data structures, algorithms, basic programming) and internship at software security company

Mathematics

RESEARCH 2006 – present

- 10 years professional experience in higher mathematics
- Expert on multivariable calculus, linear algebra, and most higher pure mathematics
- · Submitted two original research papers in algebraic topology, homotopy theory, and category theory

TEACHING 2017 – present

- Develop course objectives and learning metrics; write exams
- · Communicate complicated mathematical concepts to nonexperts

Work Experience _____

The Ohio State University

Columbus, OH

POSTDOCTORAL FELLOW Aug 2017 – present

- · Conduct research in homotopy theory and category theory; submitted two papers; delivered many invited talks at conferences and seminars
- · Lecture undergraduate and graduate mathematics classes; taught 600+ students cumulatively
- Organize weekly seminar on research to mentor graduate students; planned two successful large conferences

The University of Texas at Austin

Austin, TX

Austin, TX

GRADUATE STUDENT RESEARCHER AND TEACHING ASSISTANT

Sep 2010 - May 2017

- · Conducted research in homotopy theory, delivered many invited talks at conferences and seminars
- Served as a calculus teaching assistant, received department teaching award, advanced to role managing all undergraduate course assistants
- · Organized many seminars for graduate students

Education

The University of Texas at Austin

PHD IN MATHEMATICS 2017

MA IN MATHEMATICS 2012

Harvard University Cambridge, MA

BA IN MATHEMATICS, cum laude IN FIELD

MARCH 16, 2020 ERNIE E. FONTES · RÉSUMÉ