David White

Curriculum Vitae

Department of Mathematics
North Carolina State University
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dave-white.github.io | dave-white (GitHub)

Education

2017–present **Ph.D. (expected spring 2023)**, *North Carolina State University*, Raleigh, NC
Mathematics

2007–2011 **B.A. (2011)**, *Duke University*, Durham, NC
Philosophy and Mathematics

Research interests

My primary domain of study is low-dimensional topology, drawing from the fields of

- algebraic topology,
- differential topology,
- symplectic topology.
- knot theory,
- gauge theory,

Of particular interest are the applications of Floer homology theory and the Atiyah-Floer conjecture.

Writing

expected 2022 David G. White. “Symplectic Instanton Knot Homology”. In: (2022)

Skills

Computing

Mathematical	SymPy, Maple, MATLAB, Mathematica	High-level	C/C++, Java, VisualBasic (.NET)
Scripting	Python, PHP, Javascript, Vimscript, `bash`, `zsh`	Document / Markup	TEX, HTML, CSS, Markdown
System	Linux, MacOS	Version control	Git

Languages

French	Intermediate	*Proficient reader, intermediate to advanced listening comprehension, developing speaker. Some university coursework.*
German	Beginner	*Some university coursework.*

Employment

2017 **Tutor**, *Mathnasium*, Huntersville, NC
Mathematics tutor for K-12 students.

2015–2016 **Associate Software Developer**, *iPipeline, Inc.*, Exton, PA
Front- and backend developer of engine producing prospectus for insurance and other actuarial products.

2011–2013 **Senior Developer**, *BPM Specialists, Inc.*, Atlanta, GA
Pega-certified Senior Developer & Systems Architect. Worked on Java-based business process management (BPM) applications for clients including Wells Fargo and TSYS.

TEACHING

All courses below were held at North Carolina State University (NCSU).

Primary instructor

Course	Terms
Calculus III - Multivariable calculus	Fall 2019
Topics in Contemporary Mathematics	Summer 2, 2021 & 2019

Recitation leader (teaching assistant)

Course	Terms
Survey of Geometry	Fall 2021
Calculus III - Multivariable calculus	Spring 2021 & 2019
Calculus I - Single-variable calculus	Spring 2020, Fall 2018