# **Stephen Thompson**

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#### About me

I am a full-stack web developer living in Chicago, with a PhD in applied mathematics. I love working with the back end of web applications and am excited to apply my coding skills, together with my strong analytical background, in the private sector after several years of teaching. For fun, I like to go on bike rides with my wife Kate.

#### Links

Professional Portfolio:

sgthompson.herokuapp.com

Github Page:

https://github.com/SThompsonChicago

#### Skills

### Web Development

I am a full-stack web developer, comfortable with JavaScript, NodeJS, Express, the the MERN stack, React, MySQL, Handlebars and more.

#### **Mathematics**

I have a strong background in differential equations, linear algebra, mathematical modeling and real analysis. I also have past experience in optimization, numerical analysis, numerical linear algebra and probability theory.

### Communication

I have excellent verbal communication skills from spending several years teaching. I also have excellent written communication skills and have published several scholarly articles in peer-reviewed journals.

## **Education**

*Certificate,* Full-Stack Web Development Northwestern University, 2021

Doctor of Philosophy, Applied Mathematics

University of Maryland, Baltimore County (UMBC), 2013

Master of Science, Applied Mathematics

University of Maryland, Baltimore County, 2009

Bachelor of Arts. Mathematics

University of Maryland, Baltimore County, 2008

Professional Experience

Part-time instructor

2015-2021

University of Maryland, Baltimore County

1000 Hilltop Circle Baltimore, MD 21250

Courses taught: partial differential equations (Math 404, four times), linear algebra (Math 221, seven times), differential equations (Math 225, three times), multivariable calculus (Math 251, three times) and geometry (Math 306). Also worked as an academic advisor for new students.

High School Teacher

2019-2020

Baltimore City Public Schools

200 E. North Ave Baltimore, MD 21210

Courses taught: Algebra II and College Readiness Mathematics.

Affiliate Faculty

2017-2019

Loyola University, Maryland

4501 N. Charles St. Baltimore, MD 21210

Courses taught: Applied Calculus (MA151, once), Calculus I (MA251, twice), Calculus II (MA252, three times).

Collective member

2017-2019

Alternative Press Center

2239 Kirk Ave.

Baltimore, MD 21218

I helped write and edit the Alternative Press Index, which is carried by many academic libraries and is published twice per year.

Part-time instructor

2014-2016

Community College of Baltimore County

10300 Grand Central Ave

Owings Mills, MD 21117

Courses taught: statistics (Math 153, two times), college algebra (Math 163, three times), and high school algebra (Math 081, 082 and 083).

Teaching Assistant

2008-2013

University of Maryland, Baltimore County

Courses taught: calculus I (Math 151), calculus II (Math 152), and precalculus (Math 150).

# Selected publications

Thompson, S. 2021. "The total movement of this disorder is its order': Investment and utilization dynamics in long-run disequilibrium." *Accepted for publication*.

Thompson, S. 2020. "Growth, external markets and stock-flow norms: a Luxemburg-Godley model of accumulation." *Cambridge Journal of Economics* 44(2): 417-443.

Thompson, S.: 2014. "Convergence of nonlocal diffusion models on lattices." *Journal of Mathematical Analysis and Applications* 415: 1-13.

Thompson, S. and Seidman, T. I. 2013. "Approximation of a Semigroup Model of Anomalous Diffusion in a Bounded Set." *Evolution Equations and Control Theory* 2: 173-192.

Thompson, S. 2010. "An Extension of Browder's Non-Ejective Fixed Point Theorem," *Fixed Point Theory* 11: 143-146.

#### Service

Volunteer Tutor

2013

Goucher Prison Education Partnership

I tutored students at the mens' prison in Jessup, Maryland.

Member, Fair Labor Standards Advisory Group University of Maryland, Baltimore County

2009

This group reviewed labor issues at factories that produce UMBC's university-logo apparel. The group was appointed by the university president. As a member, I helped convince the administration to affiliate with the Worker Rights Consortium.

#### Award

Recognized for outstanding mathematics research in 2012 by the College of Natural and Mathematical Sciences, UMBC.

### References

Available upon request.