Stephen Thompson

Location: Chicago, IL 60647

Portfolio: https://sgthompson.herokuapp.com

Phone: (410) 688-1617 Email: drsgthompson@gmail.com

Summary Full-stack web developer and mathematician living in Chicago. PhD in applied

mathematics. Over five years of experience teaching mathematics, and three years writing code. Recently finished the full stack boot camp at Northwestern

University.

Technical Skills JavaScript, Node, Python, the MERN stack, MVC design, Express, React, MySQL,

Handlebars, AJAX, Git, HTML, CSS, iQuery, MongoDB, NoSQL, Visual Studio,

Bulma, Bootstrap and GraphQL.

Soft skills Patient, innovative, and able to see the big picture.

Projects Epidemic Simulator

Single-page web application created with React. Takes in user inputs, solves a system of 400 nonlinear differential equations, and displays the results as an ani-

mation in real time as the equations are being solved.

Deployed app: https://sthompsonchicago.github.io/pandemic-simulator/ GitHub repo: https://github.com/SThompsonChicago/pandemic-simulator/

MERN Blog

This is a blog that allows a user to create an account, write blog posts and view

posts by others. It was created using the MERN stack.

Deployed app: https://vast-mountain-43651.herokuapp.com GitHub repo: https://github.com/SThompsonChicago/mern-blog

More projects: https://sgthompson.herokuapp.com/portfolio

Education Certificate. Full-Stack Web Development

Northwestern University, 2021

Doctor of Philosophy, Applied Mathematics

University of Maryland, Baltimore County (UMBC), 2013

Professional Experience

Instructor, Mathematics

2015-2021

University of Maryland, Baltimore County (Baltimore, Maryland)

Taught a variety of courses including ordinary and partial differential equations, linear algebra and multivariable calculus.

High School Teacher

2019-2020

Baltimore City Public Schools (Baltimore, Maryland)
Taught algebra to students at Forest Park High School.

Affiliate Faculty

2017-2019

Loyola University, Maryland (Baltimore, Maryland) Taught a variety of undergraduate calculus courses.

Selected publications

Thompson, S. 2022. "The total movement of this disorder is its order': Investment and utilization dynamics in long-run disequilibrium." *Metroeconomica (accepted)*. Link: https://onlinelibrary.wiley.com/doi/abs/10.1111/meca.12377 Web app: https://sthompsonchicago.github.io/macro-disequilibrium/

Thompson, S. 2020. "Growth, external markets and stock-flow norms: a Luxemburg-Godley model of accumulation." *Cambridge Journal of Economics* 44(2): 417-443. Link: https://academic.oup.com/cje/article-abstract/44/2/417/5644063

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

Link: https://www.sciencedirect.com/science/article/pii/S0022247X14000705

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.

Link: https://www.aimsciences.org/article/doi/10.3934/eect.2013.2.173 Web app: https://sthompsonchicago.github.io/pandemic-simulator/