

Nathan Breitsch

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📄 <https://github.com/nathanbreitsch>

Education

- Expected 2016 **M.S. Computer Science**, *Kent State University*.
2014 **B.S. Mathematics**, *Ohio University*, Honors Tutorial College.

Experience

- Oct 2014 - Present **Statistical Computing Co-op**, LUBRIZOL, Wickliffe, OH.
○ Developed single-page application (using Knockout) for formulating engine oils and predicting/optimizing their properties.
○ Created dynamic and interactive visualizations using D3 and Shiny/R/ggplot2
- Summer 2013 **Data Analytics Intern**, EXPLORYS, Cleveland, OH.
○ Investigated prevalence of errors in electronic medical records
○ Developed data quality reporting capabilities using Hadoop, Java, and R
- 2011-2013 **Research Assistant**, DEPARTEMENT OF MATHEMATICS, Ohio University.
○ Worked with a team of researchers to solve mathematical problems from biology
○ Designed and implemented algorithm for geometric study of cell cycle synchronization models
○ Authored and published an article for the Journal of Mathematical Biology

Publication

- Journal of Mathematical Biology **Cell cycle dynamics: clustering is universal in negative feedback systems**, Breitsch¹, Moses G, Boczek E, Young T, **May 2014**.
<http://www.ncbi.nlm.nih.gov/pubmed/24816612>

Honors and Awards

- 2015 Kent Hack Enough: Most Commercial Potential
2014 Dean's Citation for Outstanding Thesis
2013 COF Bioinformatics Scholarship
2012 COMAP Mathematical Modeling Contest Honorable Mention