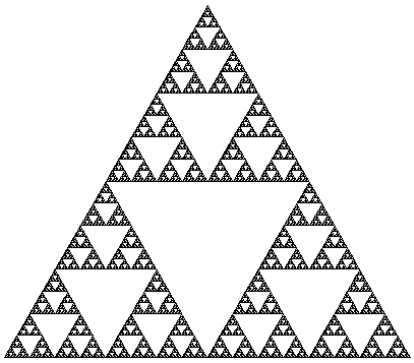

Rachel Dicken

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rndicken137.github.io Tucson, AZ

Strengths

Mathematical Problem Solving
Organization
Time Management
Task Oriented
Communication
Goal Setting
Self-Motivated

Programming

HTML5	Fluent
Java	Proficient
Python	Proficient
MATLAB	Proficient
JavaScript	Intermediate
C/C++	Intermediate
GAP	Intermediate

Education

Masters of Science - 2015
Computational Group Theory
University of Arizona
- Thesis under Klaus Lux
- Harvill Fellowship 2014

Bachelors of Science - 2013
Comprehensive Mathematics
Minor in Computer Science
University of Arizona
- Summa Cum Laude
- Galileo Circle Scholar 2012
- Outstanding Math Senior

Profile

Self-driven Mathematics Teacher with 4 years' experience educating and mentoring. Fast learner with research in applied math, signal processing, and computational group theory. Enjoys working autonomously, problem solving, programming, data analysis and visualization. Recognized as someone with organizational skills and attention to details.

Experiences

Mathematics Subject Expert Teacher – BASIS Oro Valley, 2015 – 2019
- AP Calculus Exam average increased by 12% over my 4 years teaching
- Developed and implemented Curriculum for Multivariable Calculus
- Managed and organized teaching assistants and senior research projects

Computational Group Theory Research – University of Arizona, 2014 – 2015
- Completed and defended Master's thesis in less than a year
- Gained experience with GAP: Groups, Algorithms, Programming
- Scientific and technical writing and presenting

Instructor – University of Arizona, 2013 – 2015
- Taught 4-week Discrete Math for Department of Computer Science
- Taught Calculus, Preparation for Calculus, and College Algebra while in master's program
- Honed presenting, verbal communication, thinking under pressure

Data Visualization Project – University of Arizona, Spring 2015 Graduate Course
- Created web-based visualization of LEGO sets database
- Implemented T-SNE algorithm for this high-dimensional set
- Worked with D3: Data-Driven Documents JavaScript Library

Theoretical Signal Processing Research – Raytheon, Summer 2012 Intern
- Debugged and addressed code readability issues in existing programs
- Implemented theoretical algorithms in MATLAB, C, C++
- Proved theoretical signal processing theorem

Sequence Accelerators Independent Study – University of Arizona, Summer 2011
- Studied numerical analysis, sequence accelerators, Wynn's ρ-algorithm
- Analyzed data with MATLAB