Ben Jacobsen

3326 Mackland Ave. NE
Albuquerque, New Mexico

505-239-3413
bjacobsen@email.arizona.edu

Education

- **University of Arizona (Honors College)** — Tucson, AZ
  B.A., Mathematics, minor in Computer Science (GPA: 4.0) — *Expected May 2021*
  - Relevant courses: Analysis of Discrete Structures, Software Development, Cryptography, Symbolic Logic, Formal Mathematical Reasoning and Writing, Undergraduate Research Seminar in Mathematics, 4th Semester Chinese
  - In progress: Algorithms, Abstract Algebra, Theory of Graphs and Networks, Theory of Probability
- **Central New Mexico Community College** — Albuquerque, NM
  A.S. with Highest Honors, Mathematical Sciences (GPA: 4.0) — *May 2017 - August 2019*
  - Relevant courses: Mathematical Foundations of Computer Science, Linear Algebra, Ordinary Differential Equations, Calculus III, Programming in MATLAB, Calculus-Based Physics

Research Experience

- **MetroSets** — Tucson, AZ
  Undergraduate Research Assistant — *Sep 2019 - Present*
  - Designed and implemented a novel system for set visualization using the metro map metaphor, with sets drawn as subway lines and elements drawn as stations.
  - A paper describing the system has been accepted for publication at IEEE VIS, and can be read on arXiv.
- **Authorship Attribution** — Tucson, AZ
  Honors Thesis — *May 2020 - Present*
  - We are studying the feasibility of using nonstandard compiler optimizations to attack machine learning systems for classifying the author of a binary file.

Awards

Phi Theta Kappa Honors Society	2018-Present
Phi Theta Kappa Transfer Scholarship ($24,000)	2019-2020
Dean's List With Distinction	Fall 2019, Spring 2020
Highest Academic Distinction	2019-2020
Galileo Circle Scholarship ($1,000)	2020
Best Poster GD2020	2020

Skills

Programming Languages: Python, Java, MATLAB, Haskell

Operating Systems: Linux (Arch, Ubuntu), Windows 7/10

Tools: LaTeX, Git, LibreOffice, MS Office

Miscellaneous: creative problem solving, public speaking, formal and persuasive writing