

Austin Faulkner

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EDUCATION

UNIVERSITY OF TEXAS AT AUSTIN

BS MATHEMATICAL SCIENCES

Conc. Data Analysis, Real Analysis,
and Numerical Analysis

with Sec. Conc. in Pure Structures

Expected May 2022 | Austin, TX

Dept. GPA: 3.7882 / 4.0

TEXAS STATE UNIVERSITY

BS COMPUTER SCIENCE

Conc. Software Engineering and
Machine Learning

Expected May 2022 | Austin, TX

Dept. GPA: 3.86 / 4.0

ABILENE CHRISTIAN UNIVERSITY

BA PHILOSOPHY, LINGUISTICS,
ENGLISH LITERATURE

Cum. GPA: 3.96 / 4.0

LINKS

Github:// [Austin-Faulkner](#)

LinkedIn:// [austin-faulkner](#)

Website:// [godel-and-austin-walk](#)

COURSEWORK

UT AUSTIN / TX STATE

Real Analysis

Mathematical Statistics

Data Structures & Algorithms

Machine Learning

Databases

Data Mining

Numerical Analysis

Operating Systems

Internet Software Development

Software Engineering Proj., spring 2022

CARNEGIE MELLON

Mathematical Logic

Causal & Statistical Inference

SKILLS

PROGRAMMING

Over 15000 lines:

C++ • \LaTeX

Over 5000 lines:

Java • Python • C

Familiar:

R • Mathematica • Matlab • Fortran

HTML • CSS • SQL • Docker • Swift

EXPERIENCE

VANDERBILT | COMPUTATIONAL NANOSCIENCE PHYSICS INTERN

May 2013 – Aug 2013 | Nashville, TN

- Emphasis on nanotubes and computational methods for modeling their special properties.
- Exposed to LAMMPS Molecular Simulation and Octopus Automation Environments

LEARNING LAB | SECONDARY MATHEMATICS & PHYSICS

TEACHER / TUTOR

Sep 2011 – May 2012 | Nashville, TN

- Taught HS (Honors) Algebra I-II, Geometry, PreCalculus, Calculus, and Physics

THE AUSTIN ACADEMY | SUPERVISOR OF THE PILOT ABE PROGRAM AND LEAD ABE INSTRUCTOR

March 2010 – August 2011 | Austin, TX

- Taught GED content as a substitute teacher for several months.
- Hired in August 2010 as a full-time mathematics and reading instructor, I spearheaded the pilot Adult Basic Education Program.
- The grant through ACC was renewed for the following fiscal year.

MORE THAN A TEACHER | SAT / ACT CURRICULUM

TEACHER & TUTOR

Feb 2010 – Feb 2011 | Westlake, TX

- Taught / tutored courses in SAT / ACT preparation
- Subject tutoring: HS mathematics and physics (often AP / IB curricula)

RESEARCH

NUMBER THEORY | ELLIPTIC CURVES, MODULAR FORMS, AND L-FUNCTIONS

Feb 2016 – April 2017 | Austin, TX

Worked with University of Texas at Austin, Number Theorist Dr. Bart Goddard.

Research emphasized the pure mathematics underlying commonly implemented encryption algorithms.

VANDERBILT / COLUMBIA CYBERCAMP | MOLECULAR MODELING

May 2012 – June 2012 | Nashville, TN

Worked with LAMMPS simulation and Octopus automation tools to model graphene nanotube electrodynamics.

MCNAIR SCHOLARS RESEARCH PROGRAM | MINIMALISM & SEGMENTED DISCOURSE REPRESENTATION THEORY

Jan 2008 – Aug 2008 | Buffalo, NY

Presented 2 papers at U. of Buffalo: one on Minimalist Syntax; the other on the SDRT model of the real-time update-semantics of computational discourse interpretation.

DISTINCTIONS / SOCIETIES

2022 The CS Academic Excellence Award: 1 of 55 out of 1495+ students

2016 Eta Kappa Nu Electrical & Computer Engineering Honor Society

2008 Selected by the ACU math dept. to present, "On the Consistency of Axiomatic Systems", at the Torus Oklahoma Research Symposium

2007 Selected by ACU Honors Dept. (from body of 5000+ students

- opportunity is sponsorship only) for Rhodes Scholarship Application