

Austin Faulkner

faulkner.austin@gmail.com | 512.318.3343

EDUCATION

UNIVERSITY OF TEXAS AT AUSTIN

BS MATHEMATICAL SCIENCES

Conc. Data Analysis, Real Analysis,
and Numerical Analysis
with Sec. Conc. in Pure Structures
May 2022 | Austin, TX
Cum. GPA: 3.7998 / 4.0

TEXAS STATE UNIVERSITY

BS COMPUTER SCIENCE

Conc. Software Engineering and
Machine Learning
May 2022 | San Marcos, TX
Cum. GPA: 3.87 / 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 II

CARNEGIE MELLON

Mathematical Logic
Causal & Statistical Inference

SKILLS

PROGRAMMING

Over 15000 lines:

C++

Over 5000 lines:

Java • Python • C

Familiar:

Swift • R • Fortran • Bootstrap • Jinja

HTML • CSS • JavaScript • SQL • Docker

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

Sep 2011 – May 2012 | Nashville, TN

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

THE AUSTIN ACADEMY | SUPERVISOR OF THE PILOT ADULT BASIC EDUCATION PROGRAM (ABE) & LEAD ABE INSTRUCTOR

March 2010 – August 2011 | Austin, TX

- Spearheaded the on-boarding GED program
- Austin Community College renewed the grant the following fiscal year

MORE THAN A TEACHER | SAT / ACT CURRICULUM TEACHER & TUTOR

Feb 2010 - Feb 2011 | Westlake, TX (Worked Nights)

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

PFLUGERVILLE ISD | SUBSTITUTE TEACHER

Sep 2008 – Sep 2011 | Pflugerville, TX (Just outside of Austin, TX)

- Taught HS (Honors) Algebra I-II, Geometry, PreCalculus, Calculus, and Physics
- Occasionally taught at the Disciplinary Action Program through Pflugerville HS

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 nanotubule 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+ CS 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 |