

# Austin Faulkner

faulkner.austin@gmail.com | 512.318.3343 | Motto: Experiment. Fail. Learn! Repeat: Succeed.

## 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

### H-E-B DIGITAL | IOS SOFTWARE ENGINEER I

July 2022 – Current | Austin, TX

- Developing Quality Assurance Partner-facing application wherein H-E-B products can be real-time managed
- Developing Partner-facing Scheduling System application wherein Partners can maintain their schedules

### 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

### 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.

### 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