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
May 2022 | Austin, TX
Cum. GPA: 3.799 / 4.0

TEXAS STATE UNIVERSITY
BS Computer Science
Conc. Software Engineering and Machine Learning
May 2022 | San Marcos, TX
Cum. 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 II

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 nanotubules 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