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 nanotubules and computational methods for modeling their special properties.
- Exposed to LAMMPS and Octopus Molecular Simulation 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 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 2022 Computer Science Academic Excellence Award
2016	Eta Kappa Nu Electrical & Computer Engineering Honor Society
2016	IEEE Computer Science Student 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