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Andrew Nolte

Austin, Texas
anolte512@gmail.com

EDUCATION

UT AUSTIN
B.S. in Computer Science
Turing Scholar
(CS Honors)
May 2022

LINKS

Github:// **AndrewNolte**
LinkedIn:// **andrew-nolte**
Website:// **andrewnolte.github.io**

COURSEWORK

Computer Vision
Neural Nets
Compilers
Honors Courses:
Autonomous Driving
Concurrency
Graphics
Artificial Intelligence
Algorithms and Complexity
Operating Systems
Computer Architecture
Data Structures
Discrete Math

MISC. PROJECTS

Tamuhack 2019: Carma
Partial ARM Emulator
Critters (interpreter)
Treaps Implementation
Boggle Game
Markov Text Replicator
Motion Planner GUI (Robotics)

SKILLS

Over 5000 lines:
Python • C++ • Java • Go • Robot Programming
Over 1000 lines:
C • Web Stack • React.js • Verilog • Rust
Tools:
Git, Vim, Keras, Tensorflow, Pytorch, Docker, SQL

EXPERIENCE

SERVE ROBOTICS January 2022-Present | Redwood City, CA (remote)
Software Engineer, Navigation/Planning Team

PLAID Summer 2021 | New York, New York (hybrid)
Software Engineering Intern, Plaid Exchange Team

FACEBOOK Summer 2020 | Menlo Park, CA (virtual)
Software Engineering Intern, Misinformation Team

APPLIED RESEARCH LABORATORIES Summer/Fall 2019 | Austin, TX
Software Engineering Intern
Hurricane Harvey Damage Assessment

- Experimented with machine learning techniques in tensorflow, delivering a model for identifying areas of damage.

Underwater Robot

- Produced OpenCV solution for a tracking problem.
- Linked up code with simulator, greatly increasing development speed.

RECENT PROJECTS

GPU-ACCELERATED FLUID SIMULATION Spring 2021
Used Cuda to accelerate the SPH fluid simulation algorithm, then rendered using Marching Cubes algorithm, and the ray tracer that my partner and I also built for the class.

CATAN CSP SOLVER June 2020
A web-app created completely in python which generates a random Catan board given constraints.

FPGA FLIGHT CONTROLLER May 2019
Part of a small team that wrote flight control code in verilog, including PID Control, Motor Mixing, and communication protocols, resulting in a flyable drone.

WEBCRAWLER AND QUERY ENGINE Dec 2018
Crawled and efficiently indexed a web into a custom data structure.
Made query engine using shunting yard algorithm, supporting complex boolean logic queries. (Essentially made Google Search clone)

TETRIS, TETRIS AI Oct 2018
Programmed Tetris game and Tetris AI in Java, trained using genetic algorithm. The final algorithm is able to clear millions of lines.

HONORS / ACTIVITIES

2020-	Neo Scholar (VC mentorship community)
2018-	Turing Scholars Student Association
2016-2018	Vortx 3735 (Klein ISD Robotics Team), Programming Captain
2010-2018	Boy Scouts of America, Eagle Scout with bronze palm
2015-2018	Zeta Omicron (High School CS honor society)
	Placed in various UIL CS competitions, 8th in HP CodeWars 2017