Andrew Nolte

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EDUCATION

UT AUSTIN

B.S. IN COMPUTER SCIENCE TURING SCHOLAR (CS HONORS)

May 2022

Major GPA: 3.85 / 4.0 Overall GPA: 3.8 / 4.0

LINKS

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

COURSEWORK

Computer Vision Stanford Online Machine Learning Differential Equations Honors Courses 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 Image Convolutions

SKILLS

Over 5000 lines:

Python • C++ • Java

• Robot Programming

Over 1000 lines:

C • Web Stack • React.js • Verilog

Familiar:

React Native • SQL

Tools:

Git, Vim, Webflow, Glide, Keras/Tensorflow, Docker

EXPERIENCE

FACEBOOK May 2020 – August 2020 | Menlo Park, CA (virtual) SOFTWARE ENGINEERING INTERN, MISINFORMATION TEAM

APPLIED RESEARCH LABORATORIES June 2019 - December 2019 | Austin, TX

SOFTWARE ENGINEERING INTERN

Hurricane Harvey Damage Assessment

• Experimented with machine learning techniques in python, delivering both a tile-based classification model and a pixel-based classification model for identifying areas of damage.

Underwater Robot

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

PROJECTS

PARSEARGS DECEMBER 2019

A simple open source project that turns functions into command line functions

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 FPV drone.

HACKDFW 2019: SYNTYPE FEB 2019

Built recurrent neural network in Python to identify difficult keystroke patterns from real time keyboard input, typing Java code scraped from Github.

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 Al in Java, trained using genetic algorithm. The final algorithm is able to clear millions of lines.

MOTION PLANNER APPLICATION FALL 2017

Made open source path planning application for robotics, speeding up autonomous development for multiple teams.

HONORS/ACTIVITIES

2018- Turing Scholars Student Association2018- Association for Computing Machinery

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