Connor Nicholls

14402 W Bellfort Ave Apt 325   (818) 577-9479
Sugar Land, TX 77498   CRNicholls20@gmail.com
https://fairo20.github.io   https://www.linkedin.com/in/connor-nicholls/

EDUCATION

Texas A&M University, College Station, Texas   August 2020 - May 2024
Bachelor of Science in Computer Science
GPR: 3.865

EXPERIENCE

Contech Control Services, Houston, TX   July 2024 – Present
Associate Control System Engineer
- Developed logic for Triconex Safety Instrumented Systems for various clients
- Devised scripts solutions to optimize workflow in both Typescript and Python
- Contributed to the creation of the Contech Toolbox, a resource for company-wide scripts and utilities

Texas A&M Department of Computer Science, College Station, TX   August 2023 – Present
Undergraduate Researcher under Dr. Roger Pearce, within the University Research Scholars program
- Developed algorithmic optimizations for base-level data structures in C++ through new design methodologies and specific virtual memory mappings
- Paper accessible at "Investigation of Virtual Memory Aware Data Structures".

Fujitsu Network Communications, Dallas, TX   June 2023 – August 2023
Software Development Intern, LabOps R&D
- Developed autonomous movement systems for STM32 series microcontrollers in Micropython
- Designed and began implementation of plans for an autonomous vehicle navigating in telecom networking stations
- Overhauled previously existing patent application for rigid attachment mechanism and submitted for approval

Texas A&M Autonomous Robotics Lab, College Station, TX   August 2022 – May 2023
Undergraduate Research Assistant under Dr. Xingyong Song
- Developed Matlab portable application for model of soil-digging mechanisms
- Advised capstone project on solutions to issues within autonomous robotics platforms

RELEVANT ACTIVITIES

TAMU Robomasters - Aimbots   September 2020 – August 2023
Embedded Systems Lead (August 2022 – August 2023) / Member
- Led embedded systems team from August 2022 - September 2023
  - Spearheaded implementation of software features for 9 robots
  - Collaborated with other hardware and software teams to compete in the Robomasters North America Competition
- Developed embedded system software and advanced control routines, including resource-managed barrel rotation, autonomous patrol maneuvering, and variable drivetrain control.

SKILLS

Advanced knowledge of C++, Java, Python, Typescript, Micropython, CUDA, Spring Boot, MySQL, Git, OpenGL, CMake, Tristation, Microsoft Suite, Linux & Windows Environments