Clark Wakeland

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Education

University of Michigan   *2022-2023*

Master of Science - Aerospace Engineering - Highest Honors, *Ann Arbor, Michigan*

Georgia Institute of Technology   *2018 - 2022*

Bachelor of Science - Aerospace Engineering, CS Minor - Highest Honors , *Atlanta, Georgia*

Work Experience

Lockheed Martin   *Sunnyvale, CA*

System Integration/Test Engineer   *May 2023 to Present*

- Designed and wrote system level tests in Python, using Gitlab for version control and Agile workflow
- Developed functional tests for PowerPc based satellite processor
- Wrote closed-loop-testing to support the GNC team in satellite Yaw Flip and Event Recovery scenarios

Michigan eXploration Lab (MXL)   *Ann Arbor, MI*

Lab Member   *Fall 2022*

- Proposed changes to local satellite model on ground for testing
- Verified functionality of software changes before pushing to satellite in orbit
- Ensured near-complete packet collection during orbital passes above ground station

Blue Canyon Technologies   *Boulder, CO*

Test Engineer Intern   *May 2022 to August 2022*

- Developed testing utilities framework in Python
- Designed and performed system test procedures on flight hardware
- Worked on test backplane board to improve test speed and reduce equipment costs

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Technical Projects

Georgia Tech CASSIE Bipedal Robot controller

- Converted Matlab based controller to C++
- Integrated Yolo object detection on mechanical arm to grasp and pick up obejcts

Linux Server-Client Pair

- Used Unix stream sockets and TCP/IP protocols to send and recieve messages on Linux server

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Skills

Technical Languages: `Python` `C++` `Full Stack Web Development (React, HTML, CSS)`
Development: `Linux` `Agile Methodologies` `Gitlab` `Code Sprints` `AWS`
Systems: `PowerPc` `Satellite Processors` `Hardware-in-loop testing`

Activities and Volunteering

- Semi-professional swimmer, participated in 2021 US Olympic Team Trials
- Georgia Tech and Michigan Varisty Swimmer (Team Captain 2022)
- CodeQuest Academy - technical mentor to high school students interested in CS concepts
- STEMbassador Tech Interactive - taught STEM concepts to students in SF Bay Area