

Team Inventory

Team ZAM

20 February 2023

Instructor: Michael Leverington

Sponsor: Tim Wojtulewicz

Mentor: Daniel Kramer

Team Members: David Knight, Akiel Aries, Cody Beck, Nathan Chan



Introduction

The purpose of this team inventory document is to briefly introduce the members of our team and provide a brief overview of the training, skills, and relevant experience of each member. The purpose of this document is that it will allow the client to better understand the strengths and weaknesses of our team, so that they can know how to best support us. This also allows us as a team to collectively understand the knowledge and strengths of each other, which will be instrumental to planning out how we will handle individual task assignments, project selection, negotiating project specifications, establishing design philosophy and strategy, project scheduling, and overall project management as a cohesive team.

Nathan Chan
Applied Computer Science
Goodyear, Arizona



Education

- Verrado High School - 4.3 GPA
- Northern Arizona University
 - CS212/312 Web Programming 1 & 2
 - CS386 Software Engineering

Experience

Simple Website for Web Programming class

- Created a website using HTML, CSS, and JavaScript with the Node.JS framework.

NAU Astroinformatics Bootcamp

- Utilized mongoDB and Jupyter Notebook to study the characteristics and instances of asteroids and how they form into comets.

NAU ITS Classroom Support

- Support faculty and staff on campus by aiding in setting up/troubleshooting classroom technology.

Skills

Website Development

- Undergrad coursework/personal work utilizing HTML, CSS, JS, PHP

Adaptable

- Able to mold into many different roles as they're needed during the design process
- Can pick up on new languages, frameworks fairly quickly

Interests

- Full Stack Development
- Video Game Development
- Exploring new cultures

Akiel Aries
Computer Science
Denver, Colorado



Education

- Metropolitan State University of Denver
- Northern Arizona University
 - CS 386 - Software Engineering
 - CS 499 - Open Source Software Development
 - CYB 410 - Secure Software

Experience

NAU IoT/DiscoverCCRI Lab - Software Systems Engineer

- Contributed to circuit creation, PCB design, microcontroller & sensor development. Developed pipelines for peripherals to communicate with central servers, analysis on collected data, etc.

Ascent Services Group - Intern/Jr. Data Analyst

- Aided with analysis, cleaning, and management of recruiting related data. Helped with application/website testing.

Skills

Hardware, embedded/distributed systems, low-level programming

- [Weather station built with circuits and electrical components written in C/C++.](#)
- Work with AVR-GCC on Atmel based microcontrollers.
- [CV application written in C capable of video/image manipulation.](#)
- Sensor communication/transmission with centralized servers.

Mathematics & Machine Learning

- Undergrad coursework in mathematics.
- [Mathematics & ML package written in C++ w/ Python API.](#)

Tooling, scripting, building

- Experience with using shell, bash, and python for scripting. CMake + Make for build pipelines/process, CI/CD, and containerization of software and scripts.

Interests

- Interdisciplinary Computer Science, Engineering, & Mathematics
- Systems/low-level programming
- Open Source Software
- Traveling

David Knight
Applied Computer Science
Cleveland, Ohio



Education

- Basha High School
- Northern Arizona University
 - CS 386 - Software Engineering
 - CS 480 - Operating Systems
 - CYB 404 - Network Security

Experience

NAU ITS - Teaching Assistant

- Graded projects and assisted in instructing the lab for Computer Science II dealing with basic I/O operations, single and two-dimensional array manipulation, and linked lists.
- Graded projects for Data Structures dealing with abstract data types such as sets, lists, trees, heaps, and graphs. Tutored students as needed.

NAUgo - Application Developer

- Developed the application using an API we created to display information from PeopleSoft and TouchNet in a more organized and user-friendly layout.

Skills

- API Development
- Team Communication
- Web/App Development

Interests

- Basketball
- Traveling
- Fashion

Cody Beck
Computer Science
York, Pennsylvania



Education

- Central York High School - 4.18 GPA
- Arizona State University
- Northern Arizona University
 - CS 386 - Software Engineering

Experience

NAU RTISAN Lab

- Developed and tested benchmark programs for a secure embedded RISC-V SoC. Debugged issues involved with the compiling process of programs for a SoC without an OS.

DiscoverCCRI

- Developing a Python API that uses ROS to operate terrestrial rovers.

NAU ICONS Lab

- Developing a framework for input-output block based modeling of complex systems using physics-informed machine learning.

Skills

Embedded systems programming

- [Processor benchmarks along with proper build tools](#)

API development, robotics programming

- [DiscoverCCRI's RoverAPI](#)

Scripting, building, and deployment

- Skilled in scripting, preparing and building programs, and packages. Experienced in using Docker to containerize deployment

Interests

- Rock Climbing
- Trail Running