Team Inventory

Portcullis

September 19th, 2025

Sponsored by: Alexander Gebhart and Benjamin Walker

(General Dynamics Mission Systems)

Faculty Mentor: Bailey Hall

Team members: Christopher Son, Aiden Seay, Preston Smith, and Ryan Todd

Overview

The purpose of this team inventory document is to briefly introduce the members of our team. The following pages briefly outline the training, skills, and relevant experience of each team member.

Biographical Information

Name: Christopher Son

Major: Applied Computer Science

Hometown: SeaTac, WA

Education

Northern Arizona University

Highline Community College

Relevant Courses:

- **CS 386: Software Engineering** – Simulated real-world software development pipelines, with a focus on communication, organization, and SCRUM/waterfall methodologies to deliver a usable team-based project.
- **CS 345: Database Systems** – Studied storage solutions, architecture and technology while also gaining hands-on experience administering a MySQL database.

Work Experience

- Software Development Intern at Shamrock Foods Company: Worked on multiple teams to automate business processes using Microsoft Document Intelligence.
- Systems Administrator with GDIT: worked to provide 24/7 IT infrastructure to global clients and maintain Window Servers to meet organizational security and compliance requirements.

Skills

- At GDIT, created PowerShell scripts to automate vulnerability checking and remediation on guest Windows Server 2012 R2 VMs.
- At NAU, developed troubleshooting skills to quickly identify where bugs may be in code, and be able to abstract and decompose problems.

Other Interests:

- Interests include video game development, with a focus on fighting games.

Biographical Information

Name: Aiden Seay

Major: Computer Science B.S.

Hometown: Tampa, Florida

Education

Carlsbad High School

Northern Arizona University

Relevant Courses:

- **CYB 404: Network Security** - Studied network security and related topics, including threat classification, vulnerabilities as they manifest in TCP/IP, authentication/authorization, access control, log/traffic monitoring, reputation-based security, and secure protocols.
- **CS 312: Web Development II** - Gained experience in MVC website design, template systems, and RESTful web services.

Work Experience

- Collected, cleaned, and quality-checked trail race performance data as a research assistant from UltraSignup using Python (NumPy, Pandas) to support data analysis.
- Computer science tutor at Northern Arizona University, teaching fundamental programming concepts and data structures in both Python and C.

Skills

- Exposure to industrial control systems, digital forensics, software reverse engineering, networking, and more at the Air Force Institute of Technology's cyber course.
- Strong Python/Jupyter Notebook background with knowledge of Pandas, NumPy.

Other Interests:

- Commissioning into the United States Space Force next spring and hope to work as a Cyber Warfare Effects Officer or a Space Operations Officer.
- Interested in pursuing cybersecurity with a focus on securing programmable logic controllers within industrial control systems.

Biographical Information

Name: Preston Smith

Major: Computer Science B.S.

Hometown: Gilbert, Arizona

Education

Benjamin Franklin High School - 4.48 GPA

Northern Arizona University - 3.91 GPA

Relevant Courses:

- **CS 386: Software Engineering** - Applied software engineering and software architecture principles and techniques in the construction of complex computer programs in a team setting.
- **CS 506: Data Wrangling and Management** - Studied the fundamental principles and practices of data wrangling and management. This includes how to acquire, clean, transform, and organize data to prepare for analysis. The course also explored data integration, manipulation, visualization, and best practices for ensuring data quality and integrity.

Work Experience

- Analyzed large data sets in an astro-informatics bootcamp to help predict the accuracy of light curve models compared to asteroid data.

Skills

- Strong proficiency with JavaScript and Node.js to manage both the front-end and back-end of web applications
- Strong proficiency with C, manually managing memory and utilizing data structures to accomplish goals.
- Familiarity working with NAU's supercomputer cluster, Monsoon, remotely.

Other Interests:

- Has interest in learning how to work with hardware, specifically microcontrollers, to create physical projects from just an idea. Also, has a strong interest in understanding the theory behind electrical engineering to understand how modern technology works.

Biographical Information

Name: Ryan Todd
Major: Software Engineering B.S
Hometown: Tucson, AZ

Education

Northern Arizona University (NAU)

Empire High School

Relevant Courses:

- **CS 249 Data Structures** - Introduction to the design, implementation, and analysis of fundamental data structures and algorithms for efficient problem solving.
- **CS 460 Computer Networks** - Study of computer networking principles, protocols, and architectures with a focus on data communication and distributed systems.

Work Experience

- NAU ITS Service Desk - Provided comprehensive hardware, software, and network support for students, staff, and faculty, resolving a wide range of technical issues.
- Tucson Golden Doodles - Developed a full-stack, client-facing web application. Designed the backend using Python and Flask and built a responsive front end with HTML, CSS, JavaScript, and Bootstrap 5.

Skills

- **Programming Languages:** Proficient in C, C++, Python, and JavaScript, with extensive hands-on experience in C and C++.
- **Frameworks & Librarie**s: Skilled in Flask, SQLAlchemy, and Bootstrap 5, supporting the development of web-based platforms and intuitive user interfaces.
- **Data Management & Databases:** Strong interest in data management with practical experience using SQL for user authentication and secure data handling
- **Cloud & Networking**: Experienced with AWS S3 and computer networks, including application architecture and communication protocols, with knowledge of configuring and securing S3 buckets.

Other Interests:

- Developing client-focused software solutions, such as creating time-saving applications like those designed for Tucson Golden Doodles.