

Team Name: Fire Scout

Date: 9/19/2020

Team Inventory for Client



Sponsor: Dr. Fatemeh Afghah

Mentor: Sambashiva Kethireddy

Team Members:

Nicholas Bollone

Matthew Briody

Jacob Hagan

Kenneth Klawitter

Drew Sansom

Overview:

The team inventory documents allow us to introduce each of the members of our team. The following pages provide details into the training, skills, and relevant experience for each team member.

Team Member: Nick Bollone
Major: Computer Science
Hometown: St.Louis, Missouri



High School: Belleville East

College:

- Northern Arizona University
 - Operating Systems (CS 480)
 - Advanced Web Programming (CS 399)
 - Software Engineering (CS 386)

Work Experience:

- Most of my jobs have been physical labor jobs but those jobs have helped me with meeting demands on time and leading a team in the right direction.

Skills:

- Recursion has helped me to clean up my code and provide a deeper understanding in solving problems, mostly done in Java.
- Web Programming (PHP, SQL, Xampp) has helped me to understand how data in a database is manipulated and secured for the users.
- Operating Systems (C) helped me to better structure and organize my code for large projects, so later programmers can easily follow along.

Interests for Project:

I have an interest in machine learning and deep learning algorithms that will help to provide more information for people on the ground. AI would help me better understand how a drone can be self-flying and avoid obstacles along the way with no human interference.

Team Member: Jacob Hagan

Major: Computer Science

Hometown: Maricopa, AZ



High School: Maricopa High School

College:

- Northern Arizona University
 - Operating Systems (CS 480)
 - Advanced Web Programming (CS 399)
 - Software Engineering (CS 386)
 - Mobile Application Development (CS 399)

Work Experience:

- Student Programmer at NAU IoT Department, 1 month
 - I'm getting comfortable with IoT technologies, including Raspberry Pi and Lora.

Skills:

- Mobile Application Development (Flutter, Dart, Android Studio) has helped me learn new technologies quickly, as I took this class as a 4-week Summer Course.
- Web Programming (PHP, SQL, Xampp) has helped me to understand a lot of what goes on in the backend of Web Development.
- Operating Systems (C) helped me to better structure and organize my code for large projects, so I can work on the projects in chunks without forgetting where I may have left off.
- Software Engineering taught me how to manage a team, as well as best practices in the Software Development Cycle.

Interests for Project:

I am greatly interested in learning more about AI and machine learning. I'm also interested in building out the GUI that receives the data from the mounted microprocessor. I always welcome a learning opportunity with open arms.

Team Member: Richard (Drew) Sansom

Major: B.S. Computer Science

Minor: Mathematics, Business

Hometown: Tucson, AZ



High School: Desert Christian High School, 3.98 GPA

College

- Calvin College 2014 - 2015
- Pima Community College 2016 - 2018
- Northern Arizona University 2018 - Current
 - Computer Networks (CS 460)
 - Undergraduate Study (Testing and Validation) (CS 485)
 - Software Engineering (CS 386)

Work Experience

- Software Developer at the NAU Collaborative Computing Lab, 9 months
 - Developed Ruby on Rails web application for the National Park Service
- Research Assistant at the NAU Collaborative Computing Lab, 2 months
 - Assist in installing and building smart cameras built with Raspberry Pi's
 - Beginning programming of cameras in Python

Skills

- CSS, HTML, Javascript, Ruby on Rails, Postgres, AWS from my job
- C from 4 semesters of classes
- Java from 4 semesters of classes
- Python intermittently throughout college

Interests for Project:

I would love to learn more about machine learning in order to teach the drone how to classify fires, and use DNNs to analyze them. While this is my primary interest, I would also love to develop the GUI and program drones to communicate with one another.

Team Member: Kenneth Klawitter

Major: Computer Science

Minor: Biology

Hometown: Hector, Minnesota



High School: Hutchinson High

College:

- Northern Arizona University
 - Operating Systems (CS 480)
 - Advanced Mobile App Development (CS 499)
 - Software Engineering (CS 386)
 - Distributed Systems (CS 465)
 - Mechanized Reasoning (CS 451)

Work Experience:

- Seven years of retail experience and six years of restaurant experience. I have hired, trained and developed employees.

Skills:

- Raspberry Pi experience
- Communication & time management
- Website & mobile application development
- Experience with coding languages (C, C++, C#, Ruby, Python, Java, JavaScript, SWI Prolog, Scheme, PHP, HTML, CSS)

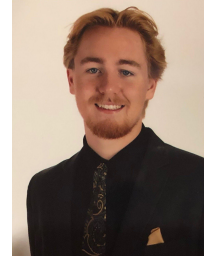
Interests for Project:

I am very interested in robotics, networking, web applications, and raspberry Pi. I also enjoy working with code and figuring out ways to optimize and refactor problems. Environmental problems are something I am very fascinated with because it helps the planet and I enjoy learning new technologies. I am excited to work with AI for the first time and learn more about it.

Team Member: Matthew Briody

Major: Computer Science

Hometown: Glendale, Arizona



High School: Deer Valley High School

College:

- Northern Arizona University
 - Operating Systems (CS 480)
 - Advanced Web Programming (CS 399)
 - Mobile Applications (CS 399)
 - Distributed Systems (CS 465)
 - Undergraduate Research (CS 485)

Work Experience:

- My jobs have included undergraduate research in which I utilized SQL queries to pull certain information from a given database. Other jobs I have had have helped me with communicational skills and working in a team.

Skills:

- Experience with coding languages (C, C++, Java, Javascript, Python, HTML, PHP, CSS)
- Mobile applications and advanced web applications taught me how to create websites and mobile applications for both Android and IOS.
- The operating systems class was very helpful in learning how to code in C as well as how to properly structure and comment code so that it is much easier and cleaner to work on.

Interests for Project:

I am very interested in learning more about software-defined radios and the Nvidia Jetson Nano Developer Kit or Raspberry Pi since I don't have any experience with either. I am also interested in machine learning and AI utilization for image processing. On top of that, I enjoy building websites and mobile applications as well as working with networks and different programming languages.