**Team Inventory** 

09/18/2023

# Team

Kowalski

# Sponsor

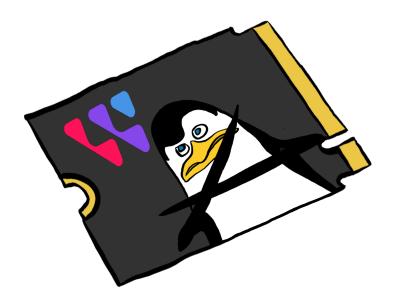
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# **Team Mentor**

Saisri Muttineni

# **Team Members**

Erick Salazar, Bailey McCauslin, Jake Borneman, Nick Wiltshire



# <u>Overview</u>

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.

Bailey McCauslin Computer Science Flagstaff, Arizona

# **Education**

- Coconino High School
- Northern Arizona University( GPA: 3.80 )
- Relative courses
  - CS345( Database Systems )
  - CS480( Operating Systems )
  - CS386( Software Engineering )
  - CS421( Algorithms )
  - CS249( Data Structures )

# **Experience**

- Software developer at research lab: My work here includes: a mental health resilient resource database using firebase and flutter and a remote sensing platform that allows users to create a remote sensing project that gets carried out through several sites that uses django, python, and javascript.
- Software engineering project: Great experience on how to work on a team to develop and deliver software. My group and I developed a meme platform that used AI to generate specific memes based on user preferences. This project used React js, firebase, and python.
- Many school projects: Creating a maze in mips assembly, operating system simulator, database using python and sql, boggle solver, and many others.

# <u>Skills</u>

- Javascript: I use javascript almost everyday. Whether it be using a framework or vanilla js.
- Python: I use python everyday. All my AI course projects are in python and I use python everyday for work.
- C/C++: Used C to build an operating system simulator and created a minecraft clone in C++ using openGL. Have used C for most courses at NAU.
- Git: I use git for work, large projects, and personal projects. I am strong in the normal everyday git commands but need to improve niche techniques.
- Firebase: I use firebase for many different projects. Each of which has their own way to hook into the database.
- SQL: Wrote SQL queries for database systems course and hooked up SQL to python for a project.

- Technical Interests: I am very interested in many domains when it comes to computer science. The main of which are computer graphics, AI, and system programming.
- Personal Interests: I really enjoy hanging out with my friends, playing video games, and football



Erick Salazar Computer Science Flagstaff, Arizona

# **Education**

- Nogales High School
- Northern Arizona University (GPA: 3.56)
- Relative Courses
  - CS 249 (Data Structures)
  - CS 345 (Database Systems)
  - CS 386 (Software Engineering)
  - CS 421 (Algorithms)
  - CS 480 (Operating Systems)

# Experience

- Personal Projects: I've developed several projects of my own to get a better understanding on how things work. They vary from simple to complex, such as creating a script using APIs to search for data in Spotify and Youtube.
- Software Engineering Project: Got to experience how to develop a software product from scratch with a group. My group developed a calendar application for Android and IOS that was linked to a database that would allow several users to share their calendar information.
- School Projects: Several projects have helped develop my programming skills among them have been the creation of an OS simulator, creating a website with database applications to store data given as inputs and writing different algorithms to be used with data structures written from scratch.

# <u>Skills</u>

- Python: I use python daily for personal projects and homeworks. I've tinkered with APIs, GUI frameworks like tkinter, and the Django framework for web development. I've also learned OOP with Python.
- C/C++: I use C and C++ daily due to classes requiring the use of these languages. I have used C to learn how data structures work, and also to build an operating system simulator. It has been my most used language in most of my NAU courses. I am currently learning C++ through my Principles of Languages class, with an emphasis in OOP.
- Git: I use git for personal projects and large projects. I am strong on the basics, but still need some more polishing on the complex utilities of Git.
- SQL: I've created several SQL databases for my web development classes, and also for a group project in my Software Engineering course.
- API: I've used the Youtube and Spotify APIs to develop several personal projects. This gave me an insight on how APIs work and what their uses are.

- Technical: I have several interests encompassing the computer science umbrella. Currently I am interested in the Data Analysis aspect of CS, as well as AI and game development.
- Personal: I enjoy playing video games, hanging out with friends and listening to music.



Jake Borneman Software Engineer Flagstaff, Arizona

### **Education**

- Arizona Lutheran Academy
- Northern Arizona University (GPA: 3.45)
- Relative Courses
  - CS 249 (Data Structures)
  - CS 345 (Databases)
  - CS 386 (Software Engineering)
  - CS 305 (Computing Tools III)
  - CYB 310 (Malware Analysis)
  - CS 567 (Advanced Software Assurance)

#### Experience

- Data Analysis Internship: Worked in a research lab located in Kyushu University where I analyzed data and issues from Open Source Software on Github.
- School Projects: WalkItOff alarm app developed as an android app. Took up the team leader role for the group making an alarm app where you would need to travel a certain distance to disable the alarm.

#### <u>Skills</u>

- Python: I had used python early in my programming career but the internship in Kyushu University had it as my main language. It was used for all data analysis and even machine learning to attempt a certain criteria assigned to the information as well as compiling and reorganizing data. Library experience in dask, pandas, regex, scikit, nltk, nlp (natural language processing), and phrase matching.
- Java: Used as the main programming language in school. Was used for the WalkItOff application as well as data structures.
- R coding:Used in the internship to compile results and show statistical values. Used for a class about modeling spread of diseases
- Git: Used Git and Github with most of my projects in classes as well as the internship. Was able to have proper documentation and version control with accuracy and non-issues.
- API: Experience with using Github's GraphQL API to retrieve information of over tons of project's issues (over a million) and organize all data from that. Slight understanding of REST API contents and pulls.
- Docker: Dabbled a bit in Docker to access and host shells to test code and experiment what the hosts have laid out for users.

- Technical: I am quite interested in many different aspects of software development and technology. My few selections though would be data analysis, AI, and robotic software.
- Personal: I enjoy spending my free time playing video games, listening to music, cooking and doing sports such as wrestling and Judo.



Nick Wiltshire Applied Computer Science Flagstaff, AZ

# **Education**

- La Costa Canyon High School
- Miracosta Community College
- Northern Arizona University (GPA: 3.50)
- Relative Courses:
  - CS 249 (Data Structures)
  - CS 345 (Databases)
  - CS 386 (Software Engineering)
  - CS 460 (Computer Networking)
  - CS 480 (Operating Systems)

# Experience

- Personal Projects: I have built lightweight webapps, and personal websites for clients. I've also dabbled in AWS when hosting sites and databases.
- School Projects: Contributed to C-Formatter, a website that allows users to upload, store, and process .c files. The site would parse through user submitted code, find formatting errors, and would return the results, giving the user suggestions on how to fix said issues. All logic was written in Vanilla JS and PHP.

# <u>Skills</u>

- Javascript: I'm most comfortable with Javascript as I've used it extensively for most of my
  personal and school projects. I have yet to dive into frameworks, however, I have light experience
  with Svelte.
- Java: Many courses at my community college, including those related to OOP and data structures were taught in Java.
- C: Currently enrolled in a Operating Systems course where we are developing an OS Simulator in the C Language. Memory leaks, data structures, and strict code formatting are all under consideration.
- Python: I have a basic understanding of python. I've taken intro courses on my own time, as well as some basic informatics courses at NAU, using python for data processing.
- Git: I've used git for version control on most of my projects, and learned foundational skills in a course at NAU.
- Virtual Machines: I have surface level experience configuring and accessing Linux and Windows virtual machines from school courses and personal projects.

- Technical: I am passionate about UI/UX Design and Development, Data Visualization, and AI.
- Personal: My top hobbies include playing tennis, surfing (when home), guitar, and spending time with my people.

