Team Inventory

2022-09-18

Project Sponsor: Joe Llama, Lowell Observatory

Faculty Mentor: Rudhira Talla, Northern Arizona University

Team: Empyrean- Henry Fye, Nhat Linh Nguyen, Jakob Pirkl, Jacob Penney, Kadan Seward

Overview

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

Biography

Hello, my name is Kadan Seward, and I am a Computer Science and Mathematics student here at NAU. I am originally from Loveland, Colorado, but moved here to be in a dark sky city.

Education

Thompson Valley High School *Aug 2015 - May 2019, GPA: 3.96*

Northern Arizona University *Aug 2019 - Present*
        Relevant Courses: Parallel Programming, Operating Systems, Software Assurance

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Experience

November 2021 - Present

NAU Collaborative Computing Lab(CCL) – *OLC Team Lead, iMATter Team Lead*
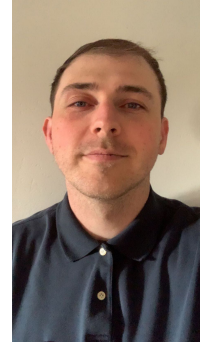- Respond to feedback about the website to improve functionality
- Design new features for clients, in order to facilitate easier usage
- Responded to feedback from a pilot test to produce an easy-to-use product

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Relevant Skills
- Through classes at NAU, I learned languages such as Java, Javascript, C, and Python, and have a comfortable grasp on them all.
- My experience with the CCL brought experience with Ruby, primarily via the web backend, Ruby on Rails
- iMATter, being a mobile app, taught me Angular with Ionic, a frontend for clean, simple user interfaces that I became proficient at.

Personal:

In my free time, I have been enjoying hiking parts of Mt. Elden, especially since trails start two blocks from where I live. I also have an affinity for science fiction, and I am currently reading A Scanner Darkly.

Biography

My name is Jacob Penney and I am an Applied Computer Science and Religious Studies student at NAU. I'm originally from Phoenix, Arizona but left for colder climes.

Education

Horizon High School *Aug 2007 - May 2011, GPA: 3.5*

Northern Arizona University *Aug 2019 - Present*
Relevant Courses: Parallel Programming, Operating Systems, Database Systems

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Experience

April 2021 - Present

Northern Arizona University – *Undergraduate Researcher*
- Built and maintained data mining and processing pipeline subsystems in Python
- Generalized project pipeline data management by implementing JSON I/O system
- Dramatically reduced processing runtime of inputs greater than millions of lines via algorithm implementation and parallelization

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Relevant Skills
- Via research at NAU, I have experience with Python and basic database management
- Through personal projects and research, I have experience optimizing programs using from-scratch data structure and algorithm implementations
- Through personal projects, I have basic web development skills with HTML and CSS

Personal:

In my spare time, I enjoy contributing to open source software projects, playing with text editors such as Vim and Emacs, and sharpening my skills with Python and C.

Biography

My name is Nhat Linh Nguyen and currently I am a senior Computer Science student at NAU. I am originally from Vietnam and have studied abroad in the U.S since Spring 2020. I decided to move to Flagstaff because of the cold weather.

Education

Northern Arizona University   Jan 2020 - Present
Relevant Courses - Operating Systems, Algorithms, Web Programming II, Database Systems

Experience

Northern Arizona University   Flagstaff, AZ
Backend Developer (Discover Portal)   May 2022 - Present
- Working in a team of three to set up the discover portal by retrieving source code from AERPAW and evaluating existing functionalities to determine how to best configure the portal
- Installed and configured the database/server for the website, as well as ran tests and fixed all database, server, and other error codes
- Developed RESTful APIs using Django and PostgresDB

Relevant Skills

- Through classes and researches at NAU, I have gained much experience in
  - Programming Languages: Python, Java, C/C++, JavaScript, HTML/CSS, R
  - Database: SQL (MariaDB, MySQL)
  - Frameworks: NodeJS, Flask, Express, ReactJS, Django, REST, Bootstrap
  - Tools: GitHub, Docker, Amazon Web Services
- Besides, I have developed my web development skills through personal projects such as building a music controller website or ecommerce page.

Personal

In my free time, I like to play outdoors like soccer or go fishing. Usually, I have a group of friends and we usually play soccer or other sports on Saturday morning. Also, to improve my programming skills, I watch videos or read articles related to programming as well as funny things. I am a fan of rap music and really like Post Malone.

Biography

My name is Jakob Pirkl, and I am a Computer Science student here at NAU. I am originally from Albuquerque, New Mexico, but moved here for the mountain and climate.

Education

La Cueva High School *Aug 2015 - May 2019, GPA: 3.75*

Northern Arizona University *Aug 2019 - Present*
    Relevant Courses: Algorithms, Software Engineering and Web Programming II

Experience

May 2022 - Present

Axient – *Software Engineering Intern*
- Developed a frontend and backend architecture for SCPI devices including power supplies and oscilloscopes
- Developed program for GPIO pin management for a Beaglebone
- Worked with a team to develop verbose flight software for an in-house satellite design
- Worked to begin development of a ground operations system to be used in said satellite's flight operations

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Relevant Skills
- At NAU I have gained experience with the following programming languages and tools: Python, Java, C, JavaScript, PHP, and HTML/CSS and have used Github extensively
- At my internship at Axient, I gained ample experience with C# and C and used Gitlab and Docker frequently

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Personal:

In my free time, I love snowboarding and spending time with my cat Zoey. I also love going on hikes and enjoying the beautiful scenery of Flagstaff.

Biography

My name is Samuel Fye, I generally go by my middle name Henry, and I am a computer science student at NAU. I was born and raised in Phoenix and ended up moving to Flagstaff for the weather and great outdoors activities.

Education

Mountain Pointe High School *Aug 2014 - May 2018*

Northern Arizona University *Aug 2018 - Present*
    Relevant Courses: DS&A, Web Programming II, Software Engineering

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Experience

May 2022 - August 2022

Amazon – *Software Development Engineering Intern*
- Worked on a team of about 10 people who focused on the Amazon's website's advertisements for Amazon Basics
- Developed an internal website with authN/Z in React to speed up a process owned by the team
- Created multiple React components the team could use for future expansion of the website
- Developed a backend for the website using AWS services such as S3, DynamoDB, and Lambda functions

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Relevant Skills
- My experience at NAU has taught me about multiple popular languages such as Java, Javascript, Python and C. School has also taught me a lot about meeting deadlines and delivering quality work
- Working at Amazon taught me about the entire software development process, how to work with a team, and how to utilize ReactJs to create frontend applications

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Personal:

I'm a huge music fan, I love to play guitar and I enjoy trying to create songs of my own with one of my best friends. Besides that, I'm big into mountain biking, video games, and just hanging out with good friends.