

# LingoPros



## Team Inventory

September 21, 2017

**Josh Shaffer, Luis Montes, Erik Strauss, Matt Quintana**

**Sponsors: Dr. Okim Kang & Dr. David O. Johnson**

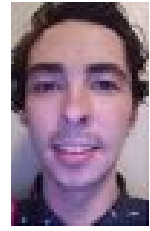
**Mentor: Ana Paula Chaves Steinmacher**



**Overview: The technological feasibility document will detail the different technologies available to implement the project, which of them we have chosen to use, and why those technologies chosen will best serve in the completion of the project.**

## Josh Shaffer

**Biographical:** Currently in my fourth year at NAU getting my Bachelor of Science in Computer Science. I am from Prescott, Arizona where I was born and raised.



**Education:** I attended Prescott High School and graduated with a 3.9 GPA. I also dual-enrolled at Yavapai Community College taking several classes before moving to Flagstaff to attend NAU. Some of the upper-division courses I have taken include, Operating Systems, Automata Theory, Principles of Languages, and Mobile App Development.

### **Experience:**

- I helped create a small scale version of BBLearn as a project that was simple and easier to use.

### **Skills:**

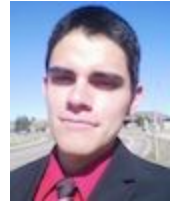
- **Web Development:** I acquired these skills from taking CS 212 (Web Development) as well as creating a website for my group project in CS 386 (Software Engineering).
- **Unity/C#:** At Yavapai College I took two classes focusing on Video Game Development using C# and Unity, I also made a simple mobile game using Unity in Mobile App Development.
- **Java:** Throughout my programming career, I have completed several different projects in Java and it is one of the languages I am most comfortable using.
- **C/Unix:** I became comfortable using C and the Unix environment during my course on operating systems as they were required in the development of all the projects.

**Other Interests:** For as long as I can remember I have been playing around on computers and it has always amazed me how they work. I have been playing video games for just as long and was always intrigued by the fact that you can load a whole new world just by putting a cartridge or disc in a machine. My dream is to develop video games and I plan on using my degree to accomplish that.

## Luis Montes

**Biographical:** Currently in my last year at Northern Arizona University for a Bachelor of Science in Computer Science with a minor in Arabic.

I was born and raised in Mesa, Arizona.



**Education:** I attended Seton Catholic Preparatory High School and graduated with a 3.4 GPA. I took a few advanced placement classes and obtained a small amount of college credit. While I have not completed my B.S. yet, some relevant courses I have taken here with a B or higher have been Web Fundamentals (CS212), Discrete Mathematics (MAT 226), and Data Structures (CS249).

### Experience:

- **Writer, Feature Adder, Host:** Wrote for Iced Development LLC.'s blog ([iceddev.com/blog](http://iceddev.com/blog)) and contributed to their Internet of Things platform ([pagenodes.com](http://pagenodes.com)). I volunteer to help run their sponsored hackathons on mostly hardware or new web tech at HeatSync Labs in downtown Mesa, Arizona.
- **JavaScript Library Contributor:** Wrote a JavaScript library for interacting with hardware (namely I2c LED displays) and presented it to judges and sponsors at an event named HackAZ, at the University of Arizona in January 2017. The library is called "node-led" and can be found on [npm.com](http://npm.com)
- **USGS Contractor:** Currently contracting with the USGS' Astrogeology department in Flagstaff as a web developer.

### Skills:

- **Arduino:** I have contributed firmware on Arduino Unos for interacting with my JavaScript library through Firmata protocol, and Arduino code is very similar to C.
- **HTML+CSS, JavaScript (jQuery, AJAX, and Node.js), PHP:**
  - I use these tools in my daily work and side projects ([grambeast.com](http://grambeast.com)).
- **Java:** Many of my classes have used Java and I have practice with it.
- **MATLAB:** The least familiar, but I used it a lot in Numerical Analysis (MAT362).

### Other Interests:

Learning foreign languages (Spanish and Arabic). Boardgames. Camping. Violin.

## Erik Strauss



**Biographical:** Attending NAU for an Applied Computer Science degree. I'm from a small town in California call Coarsegold which is about an hour outside of Yosemite National Park.

**Education:** I went to Yosemite High School and graduated with a 3.9 GPA. I've only had higher education at NAU. Some upper-division classes I've taken are CS 345 (Databases) and CS 386 (Software Engineering). I'm currently enrolled in CS 301 (Ethics), CS 399 (Mobile App Development), and CS 499 (Software Engineering Research).

### **Experience:**

- **IVR Lab Internship:** I am a programmer for various Virtual Reality projects on campus.

### **Skills:**

- **MATLAB:** I learned to use MATLAB after taking a class which involved using it for development, and I feel comfortable with it.
- **Web Development:** After taking web development and design courses here at NAU, I am more than confident in my web development skills.
- **Java:** I am comfortable in Java as it was the first language I learned to use in High School, and I have continuously used it since then.

### **Other Interests:**

- I'm a big gamer (not really surprising) and I hope to use my degree to become a game developer one day.
- As a hobby, I have a youtube channel where I upload games that I play with my friends so we can all watch it and have a good time.
- I like to hike and just generally do anything outdoors.
- I'm a big musician; I'm able to play the xylophone (or any mallet instrument), piano, guitar, some brass instruments, and the drumset.
- I like to collect comic books and pins.

## Matt Quintana



**Biographical:** I am a fifth-year undergraduate student with a double major in Computer Science and Spanish. I'm also a musician whenever I get the chance, and would hope to explore more cross disciplinary areas between art and engineering in the future.

**Education:** I've attended Northern Arizona University since 2013 and I spent a year studying at the University of Alicante where I took courses on intelligent systems, artificial vision with robotics, and web engineering, as well as being involved in an internship with the university. Here at NAU I've taken coursework on computer networks, embedded systems, and operating systems.

**Experience:** During my internship in Alicante, I collaborated with master's and doctorate students to create a dataset of 3D object scans that would be used to train and verify an object recognition system. Additionally, I developed an independent project in which I used basic machine learning concepts to create a Python program that generates "random" MIDI music.

### Skills:

- **Machine Learning:** I have a basic understanding on machine learning concepts such as neural networks and deep learning, and I have some practice implementing them in Java and in Python.
- **Web Design:** I helped develop a task manager website as a semester long project for one of my CS courses. We used tools such as Node.js, Bootstrap, MySQL, and PHP to complete the project.

### Other Interests:

I hope to specialize in Artificial Intelligence after graduation, and I would like to travel to more Spanish speaking countries to continue improving my fluency in Spanish.