

Pedram Safaei

psafaei@nevada.unr.edu
(408)-819-6209
pedramsafaei.com

PROFESSIONAL EXPERIENCE

SOFTWARE ENGINEER INTERN

The Sufferfest

Reno, NV

January 2020 – Present

Developing new functionalities as well as documenting and testing new software applications. Worked with the software team to coordinate development of new features and resolve issues surrounding current features. Conducted code reviews and submitted feedback and evaluation. Utilized Git, Jira, TestRail, Docker, Selenium, Bitrise, Kobiton, Node.js, JavaScript, TypeScript, AngularJS.

STUDENT DEVELOPER

University of Nevada, Reno

Reno, NV

August 2019 – January 2020

SEP 2019 – January 2020 [Full Stack]

Full Stack Developer for NSF-funded projects

- RET Site: Cyber Security Initiative for Nevada Teachers (CSINT)
- CyberCorps(R): "Collaborative Research: Capacity building in Cybersecurity-literacy: An inter-disciplinary approach"

Worked primarily with developing front end website architecture and designing user interactions on different web pages which required using HTML, CSS, and Sass. Resolved 50+ critical bugs in some of the already completed work when working on the back-end website applications by adopting JavaScript, jQuery and Angular.js

AUG 2019 – SEP 2019 [UX/UI]

UX/UI Developer for NSF-funded projects

- RET Site: Cyber Security Initiative for Nevada Teachers (CSINT)
- CyberCorps(R): "Collaborative Research: Capacity building in Cybersecurity-literacy: An inter-disciplinary approach"

Worked primarily with Implementing visual elements, ensuring reusable code for future use and enhancing user satisfaction using HTML, CSS, and jQuery. Also tasked with optimizing and testing the work already done before joining the team and submitting for final inspection.

TEACHING ASSISTANT

University of Nevada, Reno

Reno, NV

November 2016 – June 2019

Assisted professors and primarily lecturers in lecturing, grading, advising and course maintenance for capstone courses ME451(System Design) and ME452 (Design Synthesis). Tasked with automating student purchasing system by adopting SQL (MySQL), C++ and Python programming language to design a new tracking system, managed purchase orders of over 150 students (per year), and worked with retail analytics and projects teams to ensure all project works were handled as per best practices. Additionally, analyzed all courses' documents for accuracy and updated the courses' management system to reflect any changes made.

EDUCATION

UNIVERSITY OF NEVADA, RENO

Reno, NV

B.S. IN COMPUTER SCIENCE & ENGINEERING, Dec 2020

Minor in Unmanned Autonomous Systems

- Computer Vision Emphasis
- Dean's List

ADDITIONAL SKILLS

- | | | |
|-----------------------|-----------|-------------------------------------|
| • C/C++, Python, Java | • Node.js | • Computer Vision, Image Processing |
| • OOP, SOLID | • Django | • Machine Learning, AI |
| • JavaScript | • Angular | • VR, Human Computer Interaction |

PROJECTS AND ACTIVITIES

Thermal Camera Research (Capstone project sponsored by Iris Automation, 2019)

An important part of vision-based autonomous navigation is identifying objects that are close, or en route of conveyance in order to avoid a collision. Normal cameras apply computer vision and deep learning algorithms to achieve these objectives. However, traditional cameras are unfortunately unusable during night operations. The project aims to integrate and test usage of a thermal camera Iris Automation's CASIA collision avoidance module in order to allow for future night operations. This requires research into video compression, thermal camera calibration, and vision systems using a signal from a thermal camera.

- C/C++
- ROS
- CV
- ML
- AI

ROS Robotics Projects

Working on different projects based on ROS Robotics Projects Book (by Lentin Joseph) Projects include: face tracking controller, Camera controller, gesture recognition, etc.

- C++
- ROS
- CMake
- Python (TensorFlow)

Discord Bots

Working on different discord bots that'll help server owners do things in their guild easier. They provide various functions ranging from playing music to sending memes. They can also help in administrating the discord guild when mods are away.

- Node.js
- JavaScript
- Python
- discord.py

Price Tracker

Tracking the price of an item (currently supporting Amazon.com), sends notifications (based on the users' preference) when the prices go up or down.

- Python3

Weather Application

Building a weather application using Django which is a high-level Python Web framework that encourages rapid development and clean, pragmatic design. The design will be simple, using a search box the user would be able to search for a city in any country and get the weather report back.

- Django
- Python

Representative -- Differential fees committee at the University of Nevada, Reno (2017- Present)

Support the College's initiative to offer a globally competitive engineering education by Reviewing funding proposals and work with faculty to ensure student voices are noted and heard by giving feedback to faculty and the students that submitted proposals for funding.

Student Counselor_ Aviation Cyber Security (Sep 2017)

The aviation industry relies heavily on computer systems in its ground and flight operations. The security of the airline systems can directly impact the operational safety and efficiency of the industry, and indirectly impact its service, reputation and financial health. Hence advising people and informing them of risks involved would benefit not only people interested in that area but everyone present at the air races.