

# Lumberjack Balancing

Faculty Workload Simplified

**NAU** NORTHERN ARIZONA  
UNIVERSITY

College of Engineering, Informatics,  
and Applied Sciences

Project 16  
Faculty Workload  
Assessment System



# Introduction

## Meet the Team



**Paul Deasy**

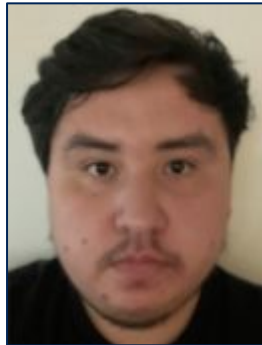
Mentor



**Riley  
Burke**



**Sergio  
Rabadan**



**Cristian  
Marrufo**



**Braden  
Wendt**





Do you ever think your professors have **too** much time on their hands?

Or maybe they can't get back to you in a **timely manner**?

They may have an **unbalanced workload**



# Our Client

- Ensures that NAU offers the courses needed for every active degree plan
- Add and phase out courses as needed
- Ensure faculty have training to deliver high quality, robust courses that prepare students for their aspirations after their degree.



**Dr. Scot Raab**

**Associate Dean for Academic Affairs**



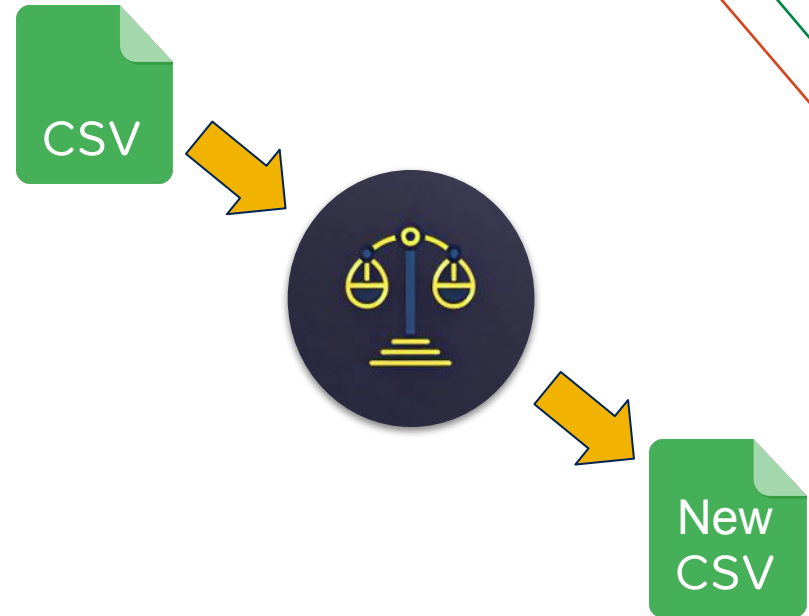
# What's the Job & Issue?

- Currently, Dr. Raab has to manually run line-by-line calculations over **hundreds of classes**.
- This process takes a considerable amount of **time & resources**, and can be automated to a high degree.



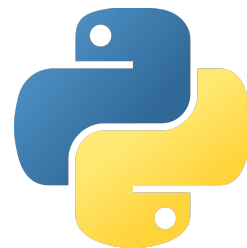
# Our Solution

- Create a **computer application** that can take in **CSV** files, parse through specific data, and output it to an algorithm.
- Create an **algorithm** that will take in the **CSV** data and produce a color coded sheet of expected teaching workload for faculty



# Plans for Development

- Use **Python** and the **PANDAS** library for parsing and analysis
- More to come



# Lumberjack Balancing

- Create an application to turn a complex CSV into a simple, color coded workload analysis
- Use Python and PANDAS
- Deal with a variety of edge cases
- Save **a lot** of hours





# THANK YOU

