# Adrian Gabales

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https://adrian-23.github.io/agabales/

## Education

- **Western Washington University** — **Bellingham, WA**
  *Bachelor of Science in Computer Science* — *Sep. 2018 – Expected Mar. 2022*

## Experience

- **WWU** — **Bellingham, WA**
  *Research Assistant* — *Sep. 2020 - Ongoing*
  - **Physically Unclonable Functions (PUF)**:
    * Worked with a variety of PUFs such as Arbiter, XOR-Arbiter, Feed-Forward and Crossfeed PUFs.
    * Used NN model to train on learning the overall security of PUFs.
    * Wrote scripts to categorize, test and compare data between the security of different types of PUFs.

## Projects

- **Lightbulb**
  *Python, Flask, HTML/CSS, Javascript, Jinja2, SQLAlchemy, jQuery, PostgreSQL* — *Jan. 2020 - Ongoing*
  - Online Web Assessment tool for instructors.
  - Utilized object relational mapper SQLAlchemy to connect Python and PostgreSQL
  - Integrated backend data with Chart.js to create graph visualizations on student responses.
  - Utilized Bootstrap for webpage needs and connected server side processing with the usage of AJAX for server side processing.

- **Youtube Playlist to Spotify Playlist Converter**
  *Python, Youtube API, Spotify API, Spotipy* — *Aug. 2020 - Sep. 2020*
  - Processes youtube playlist information and converts it to a playlist in Spotify.
  - Utilized Spotipy Python Library to gain access to the Spotify Web API.
  - Utilized both Youtube and Spotify API for transferring playlist information between the two APIs.
  - Parsed through the data given by Youtube's API in order to feed into the Spotify API.

- **Microshell**
  *C* — *Mar. 2020 - Jun. 2020*
  - A simple shell created in C that is capable of processing common shell commands.
  - Implemented common shell commands like cd, ls, pipes, processing scripts, and signal processing.

- **Deadwood**
  *Java, JavaFX* — *Sep. 2020 - Ongoing*
  - Implementation of the Deadwood card game in Java.
  - Utilized Java for creating the functionality and integrated JavaFX for the graphical user interface aspect of the game.

## Skills

- **Programming Languages**: Python, Java, C/C++, Javascript
- **Databases**: MySQL, SQLite, PostgreSQL
- **Technologies**: Numpy, Pandas, Seaborn, React, SQLAlchemy, Flask, Chart.js, Bootstrap, HTML/CSS, PyTorch, jQuery
- **Developer Tools**: VS Code, Vim, Git

## Interests and Activities

- WWU Open Source Club
- WWU ACM
- WWU FASA (Filipino American Student Association)