

Neil N. Toledo

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EDUCATION

University of California, Berkeley | Berkeley, CA | Aug 2015 – May 2019

Electrical Engineering and Computer Science (EECS)

Relevant Coursework: Principles and Techniques of Data Science, Operating Systems, Data Structures, Machine Structures, Efficient Algorithms, Computer Security, Intro to Artificial Intelligence, Intro to Database Systems, Intro to Internet: Architecture and Protocols

PROFESSIONAL EXPERIENCE

Infinite Uptime | **Data Science Intern - Summer 2018**

- Developed a responsive data visualization app for monitoring movement and conditions of manufacturing presses and machines using **Python**, **Flask**, and the **Bokeh** library. Featured a tab system to display data in different interactive formats and make future development and features easier to include and implement.
- Used **Docker** to deploy the web application with a Cloud SQL Proxy to **Google Compute Engine** and **Google Kubernetes** alongside a Flask 'Gateway' in another container.
- Added a feature to an existing admin **Flask API** that invokes a **Google Compute Engine** VM instance to run Google Big Table data migration jobs and automatically shutdown to minimize VM uptime and costs.

PERSONAL PROJECTS

CMS API - Software Design Document

Summer 2019

Wrote a comprehensive Software Design Document that includes a general overview and implementation details of a CMS API project that I'm planning to develop as an open source project. The Design Document covers the project's Microservice Architecture, Data and API Design, and Interface Design with some implementation details.

Worc_Lock

Full Stack Application
Summer 2019

Developed a personal virtual work clock that allows the user to 'clock in' and 'clock out' of their own productivity hours. The local server logs and stores each work period entry into a SQLite database. The user interface displays a stopwatch for starting and stopping work, a timesheet table of working entries, a summary time series chart and the amount of hours worked this week.

- Developed a **CRUD API** for the **SQLite** database using **node** and **Express.js** with proper API endpoints and methods.
- Developed a responsive **React.js** user interface using Material-UI and Recharts. Also created custom Table components for creating and editing displayed database entries.

mini5-engine

Javascript Node Package
Summer 2019

Developed a basic game engine for **Javascript** and the HTML5 Canvas. The game engine currently handles keyboard and mouse input processing, robust update and draw loops, scene and object rendering and basic AABB collision detection. Published on github and npm.

2Day's New Tab Page

Chrome Extension
Spring 2017

Developed and published a Chrome Extension that displays Google Calendar events, custom bookmarks and weather in place of the new tab page.

- Responsive Front End UI using **HTML**, **CSS**, and **Javascript**
- Implemented Back End in pure **Javascript** using Chrome Storage to save user settings and custom wallpapers.
- Currently published in Chrome Web Store and reached 175+ Users :)

Other Projects

Personal Site/Blog: Personal Jekyll website for showcasing projects and maintaining a consolidated reference of notes. Also includes a 'Scrum For One' dashboard with 'Sprint Summaries' and 'Daily Scrum' posts for personal projects.

ULAB Member Dashboard: Full Stack Django Project for managing ULAB club members as well as providing an online portal for members to view announcements and manage research projects.

Anibook: PWA built with React and Javascript for browsing and bookmarking currently airing Anime.

SKILLS

Technical Languages: Python, Java, C, C#, JavaScript

Additional Technologies: ReactJS, HTML, CSS, SQL, Django, Flask, BokehJS, Jekyll, NumPy and Pandas, Express.js

Software/Tools: Google Compute Engine and Kubernetes, Docker, Git/Github, Unity, Adobe Illustrator, Autodesk Maya, Fusion360

Languages: Fluent in English and Tagalog