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**EDUCATION**

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- **University of the Pacific** Stockton, CA  
*Master of Engineering, Major: Computer Science* Jan 2022 – Dec 2023
  - **Class:** Data Design, Algorithms, Optimization mathematics, Object-oriented programming, Web applications, Distributed, Multi-tiered systems
- **National Taiwan University** Taipei, TW  
*Information System training program, Major: Computer Software Engineering* Feb 2021 – Dec 2021
  - **Class:** Linear Programming, Algorithms, Write logical and maintainable code
- **Chihlee University of Technology** Taipei, TW  
*Applied English* Feb 2015 – Dec 2020

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**PROGRAMMING SKILLS**

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- **Languages:**Python, C++, JavaScript, SQL, HTML5, CSS, R **Frameworks:**AngularJS
- **Operating System:**Windows, Linux and Unix **Developer Tools:**Git, Jupyter Notebook

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**PROJECTS**

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- **Advanced MIPS Processor Simulator Suite** Jan 2023 – Jun 2023  
*GitHub: Project Demo Link*
  - **MIPS Assembly to Machine Language:** Designed a robust Python script that converts MIPS assembly code into machine language instructions.
  - **Single-Cycle MIPS Processor Simulator:** Developed and enhanced single-cycle MIPS processor simulators, providing accurate simulations of the processor's behavior and performance.
  - **Direct-Mapped and N-Way Set Associative Cache Simulation:** Created a Python program to simulate direct-mapped and n-way set associative caches. Analyzed memory access sequences using 32-bit memory addresses for 4-byte word access.
- **Analysis of Tech Layoffs and Economic Turmoil** Jan 2023 – Jun 2023  
*GitHub: Project Demo Link*
  - **Analysis of Tech Layoffs and Economic Turmoil:** Analyzed tech layoffs and economic turmoil dataset, investigating the effects of the economic slowdown and pandemic on the tech industry.
  - **Machine Learning for Predictive Analysis:** Demonstrated proficiency in machine learning by applying linear regression to predict the value of quantitative variables, such as funds raised, based on other variables in the dataset.
  - **Data Exploration and Analysis:** Conducted comprehensive exploratory data analysis, statistical tests, and visualizations to understand the distribution of industries, relationships between variables and identify significant factors influencing layoffs.
- **Language Expression Interpreter** Sep 2022 – May 2022  
*GitHub: Project Demo Link*
  - **Scanner Module for Stream Analysis:** Engineered an efficient scanner module capable of meticulously analyzing a continuous stream of characters, intelligently identifying, and extracting the expression to be assessed.
  - **Parser Module for Abstract Syntax Tree Construction:** Designed and implemented a parser module that transforms the processed character stream into an Abstract Syntax Tree (AST), representing the underlying code structure with precision and accuracy.
  - **Evaluator Component for Accurate and Efficient Results:** Crafted an evaluator component, ensuring optimal performance and adherence to language specifications. Effectively handled tokenization and parsing complexities to deliver accurate and efficient results.

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**EXPERIENCE**

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- **UOP, Dept of Engineering and Computer Science** Stockton, CA  
*Teach Assistant & Academic Tutor* Jan 2023 - Jun 2023
  - : Helping Undergraduate students in need with homework and project on a day-to-day basis in order for them to achieve their learning goals.
- **UOP International** Stockton, CA  
*Student Ambassador* May 2022 - Presnet
  - : Supervise and help a group of 20 international freshmen during orientation and provide peer-to-peer support.