# Gilberto Arellano Lopez

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## EDUCATION

**Chapman University** | Orange, CA *Expected Graduation: May 2024*

Bachelor of Science – Software Engineering, Minor: Analytics

**Relevant Coursework:** Software Principles & Design, Data Structures, Database Management, Data Science, Machine Learning, Business Analytics

## TECHNICAL SKILLS

**Programming Languages:** C++, Python, R, MySQL, HTML/CSS
**Technologies & Skills:** Git, Unix/Linux, scikit-learn, SCRUM Agile Methodology, Version Control, Documentation
**Spoken Languages**: English – Fluent, Spanish - Fluent

## PROFESSIONAL EXPERIENCE

**Operations and Technology Administrator** | Gilberto Arellano Windows, San Francisco *Jan 2012 - Present*

- Designed and developed a program written in C++ to calculate window quotes based on measurements, wood, glass, and window type, which reduced the quote calculation process by over 80%.
- Create and send quotes to clients, using strong attention to detail and accuracy to ensure that quotes are both competitive and profitable for the company.
- Created and maintain a CRM dashboard on Monday, project management software, to organize client projects, ensuring timely delivery and effective communication with clients.

**Restaurant Co-Owner** | La Capilla, Berkeley *June 2016 - December 2019*

- Oversaw the day-to-day operations of restaurant generating $50-$60k monthly sales.
- Managed a team of 9-10 employees, delegating responsibilities and providing guidance and support as needed.
- Utilized QuickBooks Online to handle payroll and accounts payable, ensuring accurate and timely processing.
- Interacted with customers to ensure high levels of satisfaction, addressing any concerns or issues promptly and professionally.
- Maintained a positive and respectful work environment, promoting teamwork and collaboration among coworkers.

## PROJECTS

**Natural Language Processing** | Python, Web Scraping, Machine Learning, OpenAI API, Keras *May 2023*

- Scraped and cleaned YouTube transcripts of Machine Learning lectures using Python.
- Fine-tuned a GPT model to mimic the lecturer's speech patterns, demonstrating transfer learning capabilities.
- Trained a local LSTM model using Keras as a comparison to the GPT model.
- Conducted a comparative analysis of the LSTM and the GPT models, offering insights into their relative strengths and weaknesses for text generation tasks.

**Window Quote/Estimate Calculator**| C++, OOP, Software Documentation, Requirements Gathering *May 2023*

- Designed and developed a quote/estimate calculator using C++ and Object-Oriented Programming principles to automate the window quote calculation process for a local window company – Gilberto Arellano Windows
- The program reads window measurements, type of glass, type of wood, and installation cost from a CSV file, resulting in a 90% reduction in quote calculation time.
- Organized the output to provide customers with a clear and comprehensive breakdown of the project cost, including unit price, unit tax, and overall project description.
- Customers reported increased satisfaction due to faster quote turnaround times and clear, organized project breakdowns.

**Game of Life** | C++, OOP, CLI, CI/CD *May 2022*

- Developed a Game of Life simulation using C++ and Object-Oriented Programming principles, utilizing data structures such as arrays and linked lists to represent the game board and simulate the game's rules.
- Implemented terminal-based input/output to provide a user-friendly interface for the simulation, allowing users to customize the game's settings and view the game's progress in real-time.
- Added functionality to read and output game board configurations from files, providing a convenient way for users to load and save custom game settings.