

# JONATHAN TAN

phone number | [email address](#)

[github url](#) | [linkedin url](#)

## Education

### Bachelor of Science in Computer Engineering

University Name

December 2017

3.75 GPA

- **Chancellor's Honor List** for 2016 - 2017 Academic Year

- **Dean's Honor List** for Spring 2016 – Spring 2017 and

Winter 2015 - Spring 2015

## Skills Summary

**Proficient in** C#, Java, WPF, SQL

**Experience with** C, C++, Swift2, Python, Structured Text, PHP7, HTML5, JavaScript

**Tools:** Microsoft Visual Studio 2013/2015, Microsoft VS Code, Neon Eclipse, Atmel Studio 7, MySQL Server, Microsoft SQL Server, Bugzilla

## Experience

### University Name Course Grader

10/2017 – Present

- **Intermediate Data Structures & Algorithms:** Graded assignments and exams of undergraduate students.

### University Name, Database Labs – Undergraduate Research

02/2017 – Present

- Developed single and multi-threaded web crawlers to build a rich data set on home values for later analysis.

### Company A - Software Engineering Internship

Summer 2017

- Initiated and led the development of a TwinCat3 PLC's HMI application, written in **C#** and **WPF**, to improve HMI customization ability and enable more features.
- Designed an efficient database schema to replace the company's previous database schema.
- Developed re-usable and robust **Structured Text** function blocks which simplified the process of communicating data between TwinCat3 PLCs and MySQL Server, and TwinCat3 PLCs and vision systems via Modbus TCP.
- Began the development of a machine monitoring web application using **Laravel** framework.

### Company B - Software Engineering Internship

Summer 2016

- Exceeded expectations set by Senior Manager by completely re-vamping 4x the number of screens expected from an intern during a 10-week internship.
- Worked in scrum development environment to re-write a legacy system with modern best practices and design patterns such as **MVVM** and **Repository**.
- Users noted that updated screens greatly simplified the user experience and provided them with a stronger sense of security.

## Projects

### Area Analysis | Java, Python, CQL, PySpark | **Demo Website:** [website link](#)

- Collected big data sets pertaining to housing prices, crime information, education level, foreclosure rate, poverty level, and available jobs for areas across the United States of America.
- Developed Python scripts to access a Cassandra database and perform inserts, queries, and calculations.
- Utilized Google Maps API with Google Fusion Tables and KML Layers to create a heat map displaying the data, partitioned by zip code.

### FetchApp: Social Rideshare iOS Mobile Application | Swift2, ParseDB, Heroku

- Directed a group of five members to create an application that turns ride-sharing into a game. The more you drive your friends around, the higher your level and ranking!

### Doge Pinball | C | **Demo Video:** [video link](#) | **Project Files:** [project link](#)

- Developed an embedded system, simulating a cross-over between pinball and skee-ball.

## Leadership

### FratName - Academic & Career Based Fraternity

- **President:** Oversaw the direction of the organization of 30+ members. 02/2016 – 02/2017
- **Vice-President of Internal Affairs:** Administered the internal aspects of the organization. 02/2015 – 02/2016