

# Tony Zhu

512-925-6961 | tonyzhu3141@gmail.com | linkedin.com/in/tonyzhu3141 | snickerton.github.io

## EDUCATION

### Texas A&M University, College Station, TX | December 2021

- B.S. in Electronic Systems Engineering Technology
- Relevant Coursework: Data Structures and Algorithms, Discrete Mathematics, Introduction to Algorithms

## SKILLS

Software Engineering • Algorithms & Data Structures • Cloud Technologies • Microservices • Version Control • Software Development Cycles • CI/CD Pipeline • Unit & Integration Testing • Agile/SCRUM Methodologies • Game Development • Android

## PROFESSIONAL EXPERIENCE

### AMAZON | Software Engineer Intern

May 2020 – August 2020

- Worked with Devices Optimization Team to improve inventory prediction, forecasting during a volatile period of demand (COVID-19).
- Enabled batch submission functionality for the internal optimizer website (Ruby on Rails) by designing and creating RESTful Java APIs.
- Doubled (*at minimum*) possible throughput for optimization requests and improved overall demand planning productivity.

### AMERICAN AIRLINES | Operations Research Intern

May 2019 – December 2019

- Applied data analytics techniques to visualize baggage routes, employee performance, and the user metrics of internal tools in Tableau.
- Implemented data cleaning and preprocessing for database entries with Python (pandas, pyodbc) and SQL (Teradata).
- Experimental development of machine learning models (SVM, random forests, etc.) to create predictive models

### SCHNEIDER ELECTRIC | Software Engineer Intern

June 2018 – August 2018

- Developed a Microsoft HoloLens app to showcase three different Schneider Electric products in AR.
- Research and initiation of automation of company-wide product request system with Computer Vision, ML, and OCR.
- Tech stack: Unity, C# scripting, Visual Studio Team Services, .NET, OpenCV, Tesseract

### CYCORP A.I. | Programming Intern and Playtester

June 2016 – August 2016

- Debugged and tested software products in a Scrum/Agile workflow environment.
- Programmed high level software in C# and CycL for company projects and products.

## PROJECTS

### Automated Flight Attendant | TamuHack

January 2019

- Won 2<sup>nd</sup> place in the American Airlines Challenge out of 100+ competing teams. Delegated team assignments while implementing an IoT server on a Raspberry Pi capable of sending POST requests via Flask.
- Created a self-driving trolley that dispensed beverages along flight aisles, working with a mechanical engineer and hardware specialist.

### MoshMusic | SXSW Hackathon

March 2018

- Developed a multi-paged social network app that created master playlists based on the attendees' Spotify music preferences.
- Handled app's front-end development in React Native for Android mobile. Managed architecture, interface design, and app structure.

## COMMUNITY

### Project Management Chair, Aggie Coding Club

12/2019 – Present

- Mentor 12+ project managers with basic software engineering and leadership principals.
- Organize activities for 200 club members and administrate project groups to facilitate a safe and fun group-learning environment.

### Hackathons

TamuHack 2020 (Student Judge) • Datathon 2019 • Twitchcon 2019 • HowdyHack 2019 • TamuHack 2019 (2<sup>nd</sup> Place) • TwitchCon 2018 (Winner, Runner Up Overall) • SXSW 2018 • TamuHack 2018 • HackTX 2018

## TECHNOLOGIES

### Languages

Python • Java • SQL • HTML/CSS • C++ • C# • Ruby

### Tools

AWS • Git • Unity • Linux • Tableau • Jira • .NET

### Others

JUnit, Mockito, RSpec, Ruby on Rails, React Native • Keras • Tensorflow • OpenCV • Tesseract OCR