

# Jian-An Lin | Software Engineer

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## Education

**Google IT Automation with Python Specialization**

Dec 2022

**Project Management Professional (PMP)® Training Program**

Oct 2022

**National Formosa University**

*Master of Mechanical Engineering, GPA: 3.6/4.0*

Sep 2020 - Oct 2022

- **Best Conference Paper Award of 4th IEEE ECICE**

Oct 2022

- Master's Thesis: "Application of Deep Neural Network in CNC Interpolation Parameter Optimization and Machining Performance Prediction"

*Bachelor of Mechanical Engineering*

Sep 2016 - Aug 2020

- **Champion of National Thematic Competition**

Nov 2019

- **Champion and Technical Excellence Award of 2nd TEL Robot Combat**

Dec 2018

## Experience

**Code Reviewer**

San Francisco, CA | Remote

*Taylor | Volunteer*

Feb 2022

- Collaborated with 5+ volunteers to evaluate, document, and report the architecture, formatting, and quality of 3+ sections of React.js and Laravel code.
- Analyzed over 300+ lines of code in the product recommendation algorithm, and presented the findings to the CEO through mind maps.

**Software Engineer**

Changhua, Taiwan | Remote

*Chin Fong Machine Industrial Co. Ltd | Academia and Industry Collaboration*

Aug 2020 - Aug 2021

- Implemented 9 servo stamping process curve interpolation algorithms using C++/Qt and TwinCAT on punch machines weighing over 2 tons.

## Projects

**Open Source Contributor**

*Google/Latexify | A library to generate LaTeX expression from Python code*

Nov 2022 - Present

- Fixed bracket display bug, refactored over 200+ lines of code, passed over 600+ unit tests, and submitted more than 5+ commits with detailed messages to pull request. [#ref](#)
- Improved continuous integration and reduced internal testing time by 10% by adding code style integration tools to CI/CD and a testing script to ensure standard conventions in developer-submitted code. [#ref](#)

**Founder | Software Engineer**

*Fingerstyle Taiwan | An open source community collecting information for guitar lovers*

Sep 2022 - Present

- Led a development team of more than 5+ engineers and designers, including front-end, back-end, and UI/UX, to develop a web application using Next.js/TypeScript and Django/Python. *(still in progress)*
- Developed more than 3+ RESTful APIs using Docker and TDD method and deployed to AWS EC2, integrated with Jenkins for automated testing, and used Puppet for server configuration management. [#ref](#)
- Managed a social media account for over 5+ years, with over 5000+ followers. [#ref](#)

**Software Engineer**

*Robot Arm Combat, HIWIN Technologies Corp*

Mar 2020 - Aug 2020

- Created an automatic hand-eye calibration system using OpenCV and C++/Qt, achieving image calibration within 8 minutes and improving the visual positioning accuracy of the robotic arm to within 1mm.
- Implemented an object real-time detection system using Tensorflow/Mask R-CNN, integrated with a robotic arm for classifying and grasping 3 different types of recyclable objects. [#ref](#)
- Integrated an algorithm for a robotic arm to play pool and completed the action within 15 seconds. [#ref](#)

**Team Leader | Software Engineer**

*Robot Combat, TEL*

July 2018 - Dec 2018

- Led a team of 8 people in collaborating on solving 3 designated problems over a 6-month period, using Agile-like methodologies and Kanban boards for project management.
- Developed a 360-degree omnidirectional mobile robot using RobotC(C language based) to complete obstacle avoidance challenges and participate in a robot sumo competition.

## Technical Skills

Programming Languages: C/C++, Python, Javascript, MATLAB, TypeScript, Bash, SQL

Frameworks and Tools: Git, TensorFlow, Qt, OpenCV, Docker, Next.js, Django, Jenkins, Nginx, Puppet