

# Wen-Chieh Wu

TECHNICAL LEAD · SOFTWARE ARCHITECT · FULL STACK ENGINEER

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## Summary

Passionate problem solver, technology enthusiast, compassionate leader with 7+ years as software engineer and architect and 5+ years as technical lead in multidisciplinary environments.

Excel in leadership, critical thinking, communication and software engineering & architecture. Strong skills in JavaScript (incl. React, Express), Golang, Docker, CI/CD pipelines and software architecture design. Major contributor of tesseract.js (24.8k+ stars) and ffmpeg.wasm (6.1k+ stars). Certified architecting, data engineering, big data and machine learning specializations in Google Cloud Platform.

## Work Experience

### ByteDance

STAFF SOFTWARE ENGINEER

Singapore

Aug. 2021 - PRESENT

### INTELLEX

TECHNICAL LEAD

Singapore

Apr. 2020 - Jul. 2021

- Led a team of backend and frontend engineers to develop knowledge platform for law.
- Led re-architecture project which eliminates 10+ redundant services, boosts observability and flexibility of data analysis pipeline and reduce cost
- Reduced 30% of AWS cost in 2 months
- Succeed in supporting to pass company ISO 27001 annual audit without any NC.

### Delta Electronics

SOFTWARE ARCHITECT & PRODUCT MANAGER

Taipei City, Taiwan

May 2019 - Mar. 2020

- Established a cross-region project team with 10+ members to research and develop an edge computing solution in manufacturing industry.
- Designed a microservice software architecture for edge computing solution to enable flexibility and scalability.
- Adopted gitlab-CI and Ansible to deploy microservices in Kubernetes cluster to minize deployment efforts.
- Developed a tensorflow serving like interface library in Golang.

SENIOR TECHNICAL LEAD

Feb. 2018 - May 2019 (1 year 4 months)

- Established a cross-region team of engineers, designers and QA with 20+ members in charge of front-end development.
- Implemented working model for cross team collaboration and guidelines for engineers and designers.
- Led team to develop over 10 applications at the same time, 2 of them attract hundreds of users internally and improve work performance.
- Implemented API microservices with ExpressJS and deployed as AWS Lambda functions.
- Incubated 3 senior developers to become team leaders leading regional team members.

TECHNICAL LEAD

Apr. 2016 - Feb. 2018 (1 year 11 months)

- Established a team of engineers with 9+ members in charge of innovative software research and development.
- Defined and promoted in-house UI framework to all front-end developers.
- Designed and built up CI/CD pipelines with gitlab, gitlab-CI, docker, ansible and more.
- Designed and deployed applications to AWS cloud environment
- Implemented RESTful API guideline to enable consistent API design across applications.
- Led and implemented 3 projects with React and promoted to organization to boost work performance

SENIOR PROJECT ENGINEER

Sep. 2014 - Apr. 2016 (1 year 8 months)

- Member of Strategy and Innovation Research team which was under CTO to research for enterprise transformation.
- Developed application prototypes with React to demonstrate concepts to Delta senior managers (incl. CEO, CTO and COO) and got positive feedback in both 2015 and 2016.
- Operated 2 internal projects which transfers to BU/BG after incubation stage.

### IKV Technology

SOFTWARE ENGINEER INTERNSHIP

Taipei City, Taiwan

Sep. 2013 - Aug. 2014 (1 year)

- Implemented Bitcoin wallet related features.

## ETS-Lindgren

SOFTWARE ENGINEER INTERNSHIP

Taipei City, Taiwan

Mar. 2011 - May 2012

- Rewrote and enhanced signal processing algorithm and implement GUI in C#.

## Education

### National Taiwan University

MASTER'S DEGREE IN COMPUTER SCIENCE AND INFORMATION ENGINEERING

Taipei City, Taiwan

Sep. 2013 - Sep. 2014

- Got ACM 2014 Research in Adaptive and Convergent Systems (RACS '14) Best Paper Award (paper acceptance rate 23.5%).

## Honors & Awards

|      |  |                      |
|------|--|----------------------|
| 2021 | <b>Mentor</b> , CodeDay  | Remote               |
| 2020 | <b>Best PM Award</b> , Delta Research Center   | Taipei City, Taiwan  |
| 2016 | <b>Judge</b> , The InnoServe Awards 2016   | Taipei City, Taiwan  |
| 2015 | <b>Delta Electronics Representative</b> , W3C Web of Things F2F Meeting                    | San Francisco, U.S.A |
| 2014 | <b>Best Paper Award</b> , 2014 Research in Adaptive and Convergent Systems (RACS '14). ACM | Towson, U.S.A        |
| 2014 | <b>Speaker</b> , Hack in Taiwan Conference (HITCON) 2014                                   | Taipei City, Taiwan  |
| 2011 | <b>Outstanding College Youth</b> , Outstanding College Youth of National Taiwan University | Taipei City, Taiwan  |

## Certifications

|      |   |                            |
|------|---|----------------------------|
| 2020 | <b>AWS Fundamentals by Amazon Web Services on Coursera. Certificate earned at 06/28/2020</b> , AWS  | AWS                        |
| 2020 | <b>Deep Learning by deeplearning.ai on Coursera. Certificate earned at March 2, 2020</b> , deeplearning.ai  | Andrew Ng                  |
| 2020 | <b>Programming with Google Go by University of California, Irvine on Coursera. Certificate earned at January 12, 2020</b> , University of California, Irvine  | Ian Harris                 |
| 2019 | <b>Data Engineering, Big Data, and Machine Learning on GCP, a 5-course specialization by Google Cloud on Coursera. Specialization Certificate earned on August 11, 2019</b> , Google Cloud Training | Google Cloud               |
| 2019 | <b>Architecting with Google Cloud Platform, a 6-course specialization by Google Cloud on Coursera. Specialization Certificate earned on August 6, 2019</b> , Google Cloud Training                  | Google Cloud               |
| 2019 | <b>Digital Business Strategy: Harnessing Our Digital Future</b> , MIT Sloan School of Management  | MIT                        |
| 2012 | <b>Leadership Development Program</b> , National Taiwan University  | National Taiwan University |
| 2012 | <b>Cloud Computing Program</b> , National Taiwan University   | National Taiwan University |

## Side Projects

### ffmpeg.wasm

<https://github.com/ffmpegwasm/ffmpeg.wasm>

OWNER

Oct. 2019 - PRESENT

- ffmpeg.wasm is a pure Webassembly / Javascript port of FFmpeg. It enables video & audio record, convert and stream right inside browsers.
- 6.1k+ stars in Github.

### Tesseract.js

<https://github.com/nathanaelclay/tesseract.js>

CONTRIBUTOR

Feb. 2018 - PRESENT

- Tesseract.js is a pure Javascript port of the popular Tesseract OCR engine. It supports over 100 languages, automatic text orientation and script detection, a simple interface for reading paragraph, word, and character bounding boxes. Tesseract.js can run either in a browser and on a server with NodeJS.
- 24.8k+ stars in Github.

## Skills

|                      |   |
|----------------------|---|
| <b>Strong</b>        | Golang, React, JavaScript, Docker, Gitlab CI, Kubernetes, AWS, Terraform, Software Architecture Design, Microservices |
| <b>Knowledgeable</b> | Vue, Java, Python, Ansible, Latex, Bitcoin, GCP, Ruby on Rails  |
| <b>Languages</b>     | Chinese, English  |