

Chu Bo-Yu (朱柏聿)

chuboyu.tw@gmail.com

SUMMARY

Experienced in establishing and managing software teams.
Focus on large scale data-oriented AI/ML/optimization problems
5 years experience in various industries and topics, including Ads, manufacture, energy service, transportation, fintech, etc.

EDUCATION

<i>Master of Science in Computer Science</i>	Taipei, Taiwan
National Taiwan University	Sep 2013 - Jul 2015
<i>Bachelor of Science in Physics</i>	Taipei, Taiwan
National Taiwan University	Sep 2008 - Jun 2011

WORKING EXPERIENCES

CTO and Data Scientist at Credidi Inc. May 2019 - Present

- Plan technical roadmap and team at a startup, focusing fintech.
 - Designed and prepared technical abilities for handling banking data.
 - Assisted in obtaining security certification (ISO27001) with efficient modern architecture.
- Support growing engineering team (currently 5) to build products
 - Built scalable backend system for receipt logging, currently servicing 200k users.
 - Built prototypes and support APP team. Achieved fast growth and high ranking. (1st in finance, 2nd all categories. iOS and Android)
 - Instructed interns to conduct experiments, build ML systems, and analyze user behaviors.
 - Support data team to build robust and scalable data pipeline.
- Identify key business challenges, and explore possible cooperations.

Senior Software Engineer at LSC Ecosystem Corp. Feb 2019 - May 2019

- Founding Members of Software Team
 - Cooperate with teams to identify technical/business requirements and challenges.
 - Designed adaptive system structure, and implement preliminary prototype.
 - Introduced modern managing methods and development tools.

Senior Machine Learning Engineer at Gogoro Inc. Jun 2018 - Oct 2019

- Founding Members of Gogoro ML Team.
 - Designed novel ML system framework with modularized, reproducible and scalable data flow.
 - Designed, refine, implement and validate algorithms (+20% accuracy, 30% on hit rate).
 - Rebuilt system for dynamic energy price, reducing forecast time from 24hrs to 3 mins, with interpretable and financially controllable results.
 - Built monitoring and experiment systems for result validation.
 - Designed efficient mechanism for distributing smart-scooter firmware updates.
- Assisted operation and business teams with data analysis and insights.
- Provided software-related consultation towards other teams.

Research Group Manager at Bridgeway Inc. Feb 2017 - May 2018

- Support team of 13 members, investigating aspects of digital AD system.
 - Built efficient and responsive team by establishing managing principles and main objectives.
 - Improved key performance indices: prediction accuracy (-50% mean error, -5% logloss), and product recommendation (+15% on NDCG).
- Orchestrate the improvement of machine learning systems in production.

- Rebuilt machine learning systems, supporting over 3x data size, with 1/2 maintenance time. (1.5M instances/hr, 45M predictions/hr, using weeks of data)
Removed 100+ zombie modules and legacy rules with rigorous tests.
- Greatly reduced problem identification time by developing monitoring systems for ML. (100+ key metrics, 100,000+ combination, 90%+ coverage)
- Established robust experiment procedure, conducted conclusive tests on various aspects. (20+ online system tests, 100+ layout experiments resulting in 20 - 60% CTR uplift.)
- Cooperate product and sales team to achieve business goals.
 - Designed operations mechanisms, reducing up to 50% adapting cost.
 - Developed data-driven business strategy, reinforced customer services.
 - Provided business explanations and insights through detailed phenomenon studies.

Researcher at Bridgewell Inc.

Oct 2015 - Jan 2017

- Built extensive and reproducible ML experiment system.
 - Over 200 experiments conducted efficiently throughout this system.
- Technical research and performance improvement
 - Design and implement profit-oriented algorithms, improving offline profit by 5%.
 - Developed user analysis mechanism for broad audience promotion. (AUC up to 0.83)
 - Conducted 30+ experiments, improving online performance by 3%.

OTHER EXPERIENCES

Consultant, software and data system building

Sep 2019 - Dec 2020

- Planning and research cooperations on data system establishment.
- Prototype building, simulation and exploration on possible applications.

Research Assistant, advised by Prof. Chih-Jen Lin

Sep 2013 - Jul 2015

- Researched in algorithms for machine learning related optimizations.
- Development/maintenance for popular packages LIBLINEAR and LIBSVM.

PUBLICATIONS

Warm Start for Parameter Selection of Linear Classifiers

Accepted by 21st ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2015

Bo-Yu Chu, Chia-Hua Ho, Cheng-Hao Tsai, Chieh-Yen Lin, Chih-Jen Lin

- Studied primal and dual solvers with thorough experiments on 50+ datasets.
- Developed new strategies for automatic parameter finding, greatly reducing training time for regularization parameter searches.
- Released LIBLINEAR v2.0, supporting quick parameter finding.

SKILLS & ABILITIES

Software Language and Tools

- Python, Spark(Pyspark), C/C++/C#, Golang, Node.js.
- Linux, Git, CI/CD, Cloud Services(AWS, GCP)

Language abilities

- Chinese Native
- English Fluent TOEFL iBT of 106/120, 2007

MENTIONABLE RECORDS

*Taiwanese Association for Artificial Intelligence (TAAI)
Master Thesis Award*

Nov 2015

*International Physics Olympiad
Gold Medal*

Aug 2008

*Asian Physics Olympiad
Gold Medal & Best Experiment Performance Award*

Apr 2008