

## EXPERIENCE

### Senior Machine Learning Software Engineer at Facebook Inc, Seattle June. 2021 - Now

Team; Manager: Ads Core Machine Learning, Calibration and ML Robustness; Goran Predovic

- Tech lead of 2 machine learning research scientists
- Mitigated the impact of signal loss, particularly Apple's App Tracking Transparency (ATT) policy
- Researched and implemented ideas for calibration model improvements:
  - A modified machine learning algorithm for a calibration model utilizing heterogeneous data (transfer learning data, anonymized aggregated data, ...etc. )
  - A modified machine learning algorithm for a calibration model utilizing time series model prediction

### Machine Learning Software Engineer at Facebook Inc, Seattle Jan. 2020 - May. 2021

Team; Manager: Ads Core Machine Learning, Calibration and ML Robustness; Goran Predovic

- Built a new end-to-end calibration system in prepare of Apple's App Tracking Transparency (ATT) policy
- Incorporated time-based signals into the calibration model model, for improving stability in the signal loss world

### Machine Learning Software Engineer at Facebook Inc, Menlo Park April 2018 - Dec. 2019

Team; Manager: Ads Core Machine Learning, Foundation; Gyanit Singh

- Improved ads predictability by generalizing the ads ranking models
- Researched and improved the way of measuring efficiency gains
- Building a machine learning testing framework for the ads ranking stack

### Software Engineer Intern at Facebook Inc. June 2017 - Sept. 2017

Team; Mentor: Applied Machine Learning, Infra; Sunyu Duan

- To reduce space usage in the database, added a customer-defined time to live (TTL) attribute into the data pipelines
- reduced 80% space usage for short-term data and 40% for long-term data
- Side project: transformed the engine of the Facebook main machine learning platform

### Instructional Manager, team of 8 people Mar. 2016 - July 2016

National Chiao Tung University, Hsinchu, Taiwan

- Taught 100 high school students Python and AI by the Pacman Game
- Managed crew members and courses, wrote Python examples and Pacman Game environment

## EDUCATION

### M.Sc in Computer Science ( GPA: 3.85/4.0 ) Graduated in Dec. 2017

University of California, Santa Cruz

Advisor: Lise Getoor

### B.Sc in Computer Science ( Major GPA: 4.03/4.3 ) Graduated in June 2016

National Chiao Tung University, Hsinchu, Taiwan

## SKILLS

End-to-end Recommendation Algorithm and System, Python, C++, SQL, Hack/PHP

## PUBLICATIONS

Johnnie C-N. Chang, **Robert H-J. Chen**, Jay Pujara, Lise Getoor

"Clustering System Data using Aggregate Measures" <https://mlsys.org/Conferences/doc/2018/201.pdf>

SysML (2018)

- Proposed new aggregate measures for clustering system data
- The new aggregate measures performed the best among state-of-the-art metrics

## AWARDS

### 2nd Prize in Microsoft College Coding Competition, team of 3 people Nov. 2016

- Coding competition in UC Santa Cruz held by Microsoft, with 150+ participants
- Solved six out of eight coding problems in 3 hours

## SPECIALIZED COURSEWORK

*Advanced Machine Learning ( Grade: A+ )*

*Deep Learning (Online Course)*

Implemented - CNN for image recognition  
- Word2Vec

*Big Data Analytics ( Grade: A+ )*

*Big Data with Spark ( Online Course )*

Implemented - Alternating Least Squares  
- TF-IDF for entity resolution