# Ming-Chang Chiu

3710 McClintock Ave, Los Angeles, CA 90089 • http://charismaticchiu.github.io/ • +1 702-209-6629 mingchac@usc.edu • https://www.linkedin.com/in/eric-chiu • https://github.com/charismaticchiu

#### **EDUCATION** University of Southern California (USC)

Los Angeles, CA

Ph.D. in Computer Science

Aug 2018 – May 2022 (Expected)

• Advisor: Professor Shrikanth S. Narayanan

Areas of Specialty: Natural Language Processing

• GPA: 3.92

## University of Southern California (USC)

Los Angeles, CA

Master of Science (M.S.) in Electrical Engineering

Aug 2016 - May 2018

Advisor: Professor Stefan Scherer

Areas of Specialty: Data Science & Digital Signal Processing

• GPA: 3.82

# National Tsing Hua University (NTHU)

Hsinchu, Taiwan

Bachelor of Science (B.S.) in Computer Science & Electrical Engineering Sep 2011 -Jun 2015

Advisors: Professor Min Sun and Jerry Chou

Last 60 GPA: 4.05 / 4.30; Cumulative GPA: 3.82 / 4.30

# **University of Minnesota**

Twin Cities, MN

Exchange Student in Computer Science and Engineering

Fall 2014

• GPA: 4.0

# **Tsinghua University**

Beijing, China

Summer Exchange Student in Computer Science

Summer 2012

- PUBLICATIONS Ming-Chang Chiu, Tiantian Feng, Xiang Ren, Shrikanth Narayanan. Screenplay Quality Assessment: Can we predict who wins the Award? Submitted to ACL 2020
  - V. Martinez, A. Ramakrishna, Ming-Chang Chiu, K. Singla, and S. Narayanan. A system for the 2019 Sentiment, Emotion and Cognitive State Task of DARPA's LORELEI project. In Proceedings of the 8th International Conference on Affective Computing & Intelligent Interaction, September 2019. (Oral Presentation)

## WORK **EXPERIENCES**

# Signal Analysis and Interpretation Lab (SAIL), USC Link

Los Angeles, CA

Research Assistant

Aug 2018 – Present

- · Working on domain-specific feature extraction and Neural Network architectures for narrative quality assessment
- Working on statistical consistency measure in linguistic behavior
- Worked on Sentiment, Emotion, Cognitive state task of DARPA LORELEI project

#### **Institute for Creative Technologies**

Los Angeles, CA

Researcher [Project: Conversation Quality Assessment]

Jan 2017 – Dec 2017

- Trained Long Short Term Memory (LSTM) deep learning model and word embeddings for behavioral modeling based on Fisher and alcoholism treatment data
- Predicted new conversation and treatment session quality reaching 75% accuracy
- Generated conversation snapshots on top of Fisher dataset and created Amazon Mechanical Turk jobs to collect objective assessments from people

**Illumina, Inc.** San Diego, CA

DevOps Applications Intern

May 2017 – Aug 2017

Built a machine learning Cron for analyzing jobs in the High Performance Computing cluster to identify "destined to fail" jobs using Sci-kit learn, reaching 95% accuracy
Developed a deep learning Daemon that constantly loads new samples from database

 Developed a deep learning Daemon that constantly loads new samples from database (Hive) to train a classification model using Mini-batch update technique with TensorFlow, achieving 78% accuracy

• Maintained enterprise Atlassian Jira and Confluence; created customer workspaces for

internal clients

ACADEMIC Grader, University of Southern California Spring 2018

**EXPERIENCE** CS599 Special Topics: Content Detection and Analysis for Big Data

SKILLS Languages: Python, C/C++, MATLAB, Ocaml, Java, HTML/CSS, PHP, SQL, JavaScript

Technologies & API: PyTorch, Docker, TensorFlow, OpenMP, Hadoop, Spark

**RELATED** Advanced Topics in Representation Learning for NLP, Advanced Algorithms, Machine **COURSEWORK** Learning for Knowledge Extraction and Reasoning, Dialogue Systems, Affective Computing

**HONORS** Kaggle Silver Medal (top 4% out of 5,332 teams), Porto Seguro's Safe Driver Prediction

**& AWARDS** 2017

Celebrating the Viterbi Algorithm Through Art 2017 Honorary Member of Phi Tau Phi Scholastic Society 2015

Excellent Study Group Award, NTHU

2015
National Tring Hya University International Eychange Scholarship

National Tsing Hua University International Exchange Scholarship 2014