Daniel Chang

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EDUCATION

Northwestern University

Evanston, IL

B.S in Computer Science and Statistics; Major GPA: 3.96; High Honors

June 2022

SELECTED SKILLS

- Languages: Python, Scala, Java, Javascript, C#, C++
- Tools: AWS (EC2, RDS, Lambda), GCP (Dataflow, TFX, BigQuery), *nix (Docker, Cron), Terraform, Jenkins
- Technologies: pandas, sklearn, Flask, Tensorflow, Prophet, Airflow (Python), Beam (Java), React (JS), SQL
- Coursework: Statistical Language Modeling, Statistical Machine Learning (Graduate), Generative Deep Models (Graduate), Network Modelling, Online Markets, Theoretical Foundations of ML, Design & Analysis of Algorithms

EXPERIENCE

Databricks San Francisco, CA

Software Engineering/Data Science Intern: Data Team

Jun 2021 - Present

Contributing to the open source Databricks Terraform provider for Databricks infrastructure provisioning.

Snap Inc.

Los Angeles, CA

Machine Learning Engineer Intern - Ads and Monetization

Jan 2021 - Apr 2021

- Researched usage of ad attribution data to enhance existing targeting and ranking models.
- Contributed to production deep learning models to enhance Ad Ranking and Lookalike Modelling.
- Built multi-head DNN language model to predict user language preferences and combine existing models. Used dropout layers to prevent overfitting, achieving 99% accuracy on English and Spanish heads in prod.

Amazon Seattle, WA

Software Development Engineer Intern - Delivery

Jun 2020 - Sep 2020

- Developed fast order metadata visualization for the Same Day Delivery team with caching and indexing.
- Trained highest scoring product substitution model for ML class among 150+ interns/employees.

Accuity Chicago, IL

Data Analyst Intern - Payments, Software Developer Intern - Compliance

Jun 2019 - Jun 2020

Leadership and Activities

Harvard Innovation Labs

Harvard

Fall + Winter

Sep 2020 - Mar 2021

NU Competitive Programming Group

Northwestern

Founder, President

Jan 2020 - Present

GirlsCodeIt, Harrison Careers, Northwestern Peer Mentoring

Remote

Volunteer Instructor, Career Mentoring

Dec 2019 - Present

SELECTED RESEARCH AND VENTURES

- BERT context information encoding (Research): A method to extend the vocabulary encoding of BERT with a context encoding of an input token, in a given sequence of text. Saw F1 improvement over base BERT (81.57 to 83.32)
- centiments.net (Venture): Web extension and protocol for inexpensive micropayment donations. Previously in partnership with The Harvard Crimson, The Lens and The Markup, and incubated at Harvard Innovation Labs.
- BeaconCV (Venture): Google Glass application that seeks to allow patients with Alzheimers and blindness to recognize people on sight. Sponsored by Nvidia and advised by and received \$2,000 funding from Professor Hammond.
- Simple Search (Research): Wrapper for (Bidirectional Attentive Memory Networks for Question Answering over Knowledge Bases (2019)) to support natural language query parsing and a simplified data model.

AWARDS

- 2019 ACM ICPC: Top 1 at Northwestern
- 2018 National Merit: National Merit Scholarship