# Junwon Choi

**3** (310) 254-4579 **□** cjunwon.tech@gmail.com **in** linkedin.com/in/cjunwon **⊕** cjunwon.github.io

### **EDUCATION**

### University of California, Davis

Davis, CA

Master of Science, Statistics (Data Science Track)

December 2025

• Relevant Coursework: Big Data and High Performance Statistical Computing, Statistical Methods for Research

### University of California, Los Angeles (UCLA)

Los Angeles, CA

Bachelor of Science, Data Theory

June 2024

- **GPA:** 3.7 / 4.0
- Relevant Coursework: Data Analysis and Regression, Machine Learning, Data Ethics, Statistical Models in Finance
- Activities: DataRes (Machine Learning Team Lead), Undergraduate Mathematics Students Association (Member)

### **EXPERIENCE**

Research Intern

March 2023 – September 2024

Sensing and Robotics for Infrastructure (SRI) Lab at UCLA

Los Angeles, CA

- Led multiple projects to add key features to a robust road assessment web application funded by City of Los Angeles
- Integrated processing scripts to ETL pipeline on AWS S3, EC2 to automate restructuring of 10+ GB of geospatial data
- Evaluated equity and accessibility of road network using census data and network analysis on 88+ million node pairings
- Customized computer vision models to detect parked vehicles from 150+ GB of onboard vehicle camera footage

### Data Team Director / Data Editor

May 2023 - June 2024

The Daily Bruin

Los Angeles, CA

- Directed a team of 20 journalists to publish 50+ articles and data visualization inserts across multiple newsroom sections
- Expanded production capacity threefold by launching two internal production teams and training 15+ new reporters
- Reported GA4 engagement data for all 17 internal teams and advised content strategies to increase overall readership

Data Journalist October 2022 – May 2023

The Daily Bruin

Los Angeles, CA

- Pitched and produced data-driven, interactive, and responsive web articles using React, JavaScript, and HTML/CSS
- Interviewed and liaised with external organizations and individuals for dataset requests and story details

### Technician / Communications Squad Leader

October 2020 - April 2022

Republic of Korea Marine Corps

Gimpo, South Korea

- Supervised and educated a 20-person team to set up radio and wired communication networks for battalion operations
- Interpreted and translated Korean-English for ROK and U.S. officers during 3 major joint training operations

# RESEARCH/PROJECTS

### Comparing Performance of TDA Filtrations in High Dimensional Simplicial Neural Networks | Research Paper

- Designed and optimized multi-input convolutional neural network to classify high-dimensional simplicial complexes
- Assisted visual analysis of CNN convolutional layer activations influenced by varying topological features and filtrations

# Synthetic Survey Data Generation and Evaluation | Research Paper (ACM KDD 2025: ADS Track - Accepted)

- Built end-to-end pipeline to generate synthetic data using U.S. voter files with parametric, GAN, LLM based models
- Assessed synthetic data quality using 4 general utility, 1 target-specific utility, and 4 privacy metrics

# Fingerhut (Online Retailer) Strategic Consulting | Capstone Project (Data Theory, B.S.)

- Analyzed 1.6+ million customers' web sessions to extract key features driving account activation and purchases
- Implemented custom stochastic model to predict and visualize customer behavior based on advertisement exposure
- Presented insights and recommended strategic changes to Fingerhut executives to increase customer retention

# Research Paper Classification Optimization Using NLP and Instance-Based Learning | Course Project

- Developed comprehensive NLP pipeline to retrieve, process, and categorize related research papers from arXiv database
- Compared clustering models at varying complexity against fastText and ANNOY for optimal performance

### **SKILLS**

Programming Languages: Python, R, SQL (MySQL, SQLite), JavaScript, HTML/CSS, IATEX

Data Technologies: Git, AWS (S3, EC2, RDS, Lambda), Tableau, Excel, Google Analytics, Databricks

Machine Learning: PyTorch, TensorFlow, scikit-learn, NetworkX, igraph, OpenCV

Languages: English and Korean (bilingual fluency)