

# GABRIEL BO

gabebo@stanford.edu | (469) 878-0892 | linkedin.com/in/gabriel-bo | github.com/gabrielkmbo | gabrielkmbo.github.io

## EDUCATION

**Stanford University** B.S. Computer Science – Artificial Intelligence & Systems Track | GPA: 3.9/4.0  
**Classes:** Data Structure (A), Algorithms (A+), Operating System (A), Comp Arch (A), Linear Algebra & Multivariable Calculus (A+), Matrix Theory (A), Discrete & Continuous Math (A+), Probability (A), Physics (A+), ML, Computer Vision, NLP

## EXPERIENCE

**PocketChange Digital** – *Technical Co-Founder*; Stanford, CA November 2023 – Present

- Leading a startup focused on simplifying gift card liquidation, trading, & storage, securing over \$50K in initial funding, receiving YC W25 and Techstars NYC final round interviews (top 1% of 10,000+ start up applicants), and signing LOIs with 3+ CEOs (McDonald's, Dunkin, PDQ).
- Developed an end-to-end solution encompassing a trading algorithm, API-based financial SaaS for corporate integration, JWT and SSO security, a custom ML retail recommendation engine, B2B data analytics capabilities, and a Stripe payment system.
- Built full-stack app for gift card trading using Dart, JavaScript (frontend) and Python Django, Firebase, RESTful APIs, AWS (backend), Docker, Redis memory. Ensured secure, scalable transactions and data protection, allowing users to seamlessly trade and store gift cards.

**Stanford Hoover Institute** – *Technical Research Assistant | Hoover Undergrad Fellow*; Stanford, CA September 2024 – Present

- Developed detection Large Language Models (LLMs) to classify whether Russian media propaganda is human-generated or machine-generated using log probability analysis and transformer-based models.
- Assisting on a research paper with Dr. Sergey Sanovich, focusing on AI-driven disinformation detection and policy implications in Russia.

**Stanford University Graduate School of Business** – *Software Research Intern*; Stanford, CA May 2024 – September 2024

- Conducted advanced statistical analyses using R, Stata, Python on 5,000+ survey entries with 150+ variables. Created visualizations of chi-squared tests, linear regression, and confidence intervals to assess public opinion's impact on Supreme Court decisions.
- Fine-tuned an LLM AI models using data loaders on Python and Google Cloud processors to predict Supreme Court decisions, processing over 1,500 files-including 800 court documents and personal appeals-to classify cases based on specific justices.
- Assisted and presented academic research to 10+ professors, using book analysis to develop 2 publications with Dr. Malhotra.

**TriTech Software** – *Software Engineer Intern*; Allen, TX June 2023 – September 2023

- Collaborated with mentor and team member in an Agile environment with Gitlab, Jenkins, GCP cloud to work on the software to file premium tax for insurance companies
- Developed RESTful APIs to manage user's options using Kotlin, Spring Boot and PostgreSQL, experienced in full-stack development

## ACADEMIC PROJECTS

**LegalEval Large Language Model: Understanding Legal Texts** – *Client: Semantic Evaluation ACL* January 2024

- Created a custom PyTorch data loader that improved LLaMA2 model accuracy by 15% for log probability analysis.
- Implemented model parallelism techniques using Hugging Face Accelerate and DeepSpeed ZeRO 3 to cut training time by 30% on A100 GPUs.
- Executed legal text classification tasks for SemEval 2023 LegalEval, including Rhetorical Roles Labeling and Court Judgment Prediction

**ACM Convolutional Neural Network Bird Classifier** – *Client: Google BIG-Bench* November 2023

- Led the development of a custom bird classification model using PyTorch, achieving 87% accuracy across a dataset of 3,113 bird images.
- Implemented data augmentation techniques and GAN image generation to reduce overfitting by 20%, improving generalization on data.

**Stanford Marketing Group Consulting (As a Senior Consultant)**– *Client: Microsoft Azure Cloud & Lumiere Education* Winter & Spring 2024

- Researched Azure market, interviewing 30+ individuals and surveying 50+ CS/Engineering/PhD students to improve cloud services and UI.
- Collaborated with Microsoft PMs on cloud solutions. Conducted 10+ hours of A/B testing, providing 14 new suggestions to Azure team.

## LEADERSHIP EXPERIENCE AND ACTIVITIES

**New Age Learning & Be The Light Youth** – *Co-Founder, Instructor, & Executive Director of Expansion*; USA Fall 2020 – 2023

- Coached more than 30 students in speech and debate that resulted in over 3 national finalists and 12 state finalists in California.
- Led and organized a 501(c)(3) non-profit, raising over \$175,000 to support children in need of educational assistance in Texas.

## HONORS

- Publishing a book with Dr. Malhotra: "Majority Opinions: How an Out-of-Step Supreme Court Can Affect the Rule of Law" 2024
- Publishing a paper with Dr. Malhotra: *The Politics of Small Business Owners* 2024
- 2 Time National Finalist in International Extemporaneous Speaking (NSDA) 2022 & 2023
- AWS Certified Cloud Practitioner 2024

## ADDITIONAL INFORMATION

**Computer Skills:** Java, Python, Kotlin, C++, C, React, Node.js, AWS, GCP, Pytorch, Tensorflow, SQL, Dart, Javascript, Angular, NumPy, Deep Learning, NLP, Principal Component Analysis, K-Means, Singular Value Decomp, Least-Squares, Linux, LLM, Machine Learning, Git, Databases