

CARLOS GUSTAVO SALAS FLORES

+86 (152) 107-33068 ◇ Beijing, China

yuseicarlos2560@protonmail.com ◇ [linkedin.com/in/carlosgsalas/](https://www.linkedin.com/in/carlosgsalas/) ◇ www.cgsalas.com

EDUCATION

Master of World Economy, Beijing Normal University Business School Sep 2025 – Jun 2027
Beijing, China

GPA: 3.80/4.00

Silk Road Muduo Scholarship

Relevant Coursework: Chinese Economy, Economic Development, International Economics

Research Focus: Government Structures and Economic Performance

Dual Bachelor's Degrees, Duke Kunshan University & Duke University Aug 2019 – May 2023
Kunshan, China / Durham, NC

B.S. in Data Science, Duke Kunshan University; B.A. in Interdisciplinary Studies, Duke University

GPA: 3.59/4.00

Dean's List (2019, 2020)

Capstone: "Evaluating Deep Reinforcement Learning for Asset Management in the Crypto Market"

PROFESSIONAL EXPERIENCE

Software Development Engineer Jul 2023 – Sep 2025
Amazon Web Services (AWS) *Seattle, WA*

- Addressed AWS Lambda's unpredictable capacity demand spikes by developing an ML-driven forecasting system for On-Demand Concurrency, deploying models across four regions (~30% of traffic) and generating over \$2M in annualized infrastructure savings.
- Reduced Lambda abuse-related infrastructure losses by analyzing usage patterns, identifying behavioral signals distinguishing abusive from legitimate workloads, and implementing a mitigation algorithm that prevented over \$100K/month in losses while minimizing customer impact.
- Resolved a sensitive \$500K customer billing incident by reconstructing historical usage patterns, identifying affected accounts, and establishing a data-driven process to determine accurate refund obligations.

SELECTED PROJECTS

Founder May 2026 – Present
MandoLearning, Language Learning Platform *Remote*

- Built and launched an alpha-stage Chinese language learning platform after identifying challenges in listening practice, developing transcript-based learning tools, vocabulary tracking, and progress management features.
- Designed and implemented backend services using Java and AWS infrastructure, including user authentication and data management systems supporting an active user-facing product.

RESEARCH EXPERIENCE

Undergraduate Researcher Sep 2022 - May 2023
Duke Kunshan University *Kunshan, China*

- Investigated methods for improving text-image alignment by independently implementing and training CLIP models from scratch using self-curated image-text datasets.
- Designed the complete research pipeline, including data collection, model development, and evaluation; published findings as first author at the Neural Compression Workshop at ICML 2023.

Research Assistant

Duke University Sanford School of Public Policy

Jan 2021 – May 2021

Durham, NC

- Analyzed survey data examining Latino families' experiences with income assistance programs across North Carolina, applying Python and R to identify patterns and generate visualizations for a published policy report.

Research Scholar

Duke Kunshan University

May 2021 - Sep 2021

Kunshan, China

- Evaluated algorithmic trading approaches by implementing a statistical arbitrage strategy in Python and comparing machine learning-based and statistical methods for financial market prediction.
- Contributed research published at IEEE Blockchain 2023.

PUBLICATIONS

- Zhang, L., Salas-Flores, C.G., Zou, D. "Making Text-Image Connection Formal and Practical." *Neural Compression Workshop at ICML 2023*. [\[Link\]](#)
- "A Data Science Pipeline for Algorithmic Trading: A Comparative Study of Applications for Finance and Cryptoeconomics" *IEEE Blockchain 2023*. DOI: [10.1109/Blockchain55522.2022.00048](https://doi.org/10.1109/Blockchain55522.2022.00048)

LEADERSHIP & ACTIVITIES

Co-Founder

Borderless Breaking Crew

2022 – Present

Seattle, WA / Beijing, China

- Founded a six-member breaking crew to create a dancers community among international dancers, organizing recurring practice sessions and building connections across Seattle and Beijing's street dance communities.
- Performed and competed in regional events including Northwest Sweet 16 (Seattle), Vancouver Spring Dance Festival, and Enter the Graveyard (San Francisco).

Cultural Ambassador

Beijing Normal University

2026

Beijing, China

- Designed and organized an interactive cultural booth representing Mexico, engaging 100+ participants through activities introducing Mexican history and traditions.

SKILLS

Technical Skills

Python, Java, SQL, Machine Learning, Data Analysis & Visualization, AWS Cloud Services

Languages

Spanish (Native), English (Fluent), Mandarin Chinese (HSK 4, 253/300)