

Sebastian Montoya

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PROFESSIONAL EXPERIENCE

Montoya Family Group – Board Member

Bogota, Colombia — 2022 – Present

- Serve on board of family group overseeing assets across real estate, automotive, insurance, music, and public markets; evaluate operating performance, strategic initiatives, and capital-allocation opportunities.

Yahoo! – Machine Learning Engineer II

New York City, NY — 2024 – Present

- Independently led design, implementation, testing, and GA launch of Yahoo's article recirculation engine serving 8M+ daily active users and 30K articles/day; supported a \$75M revenue line, increased CTR from 4.0% to 4.5%, and grew affiliate revenue by 20%.
- Architected end-to-end recommendation infrastructure spanning recall, ranking, content metadata, user signals, caching, and production serving; owned technical direction across quality, latency, reliability, and product impact.
- Selected for Yahoo News Machine Learning team to help integrate Artifact, the AI news app founded by Instagram cofounders Mike Krieger and Kevin Systrom, into Yahoo's news ecosystem after acquisition.
- Led feed-ranking and classification experiments across personalization, content quality, freshness, and user-engagement signals, improving product performance through data-driven iteration.

Yahoo! – Software Development Engineer II

New York City, NY — 2022 – 2024

- Integrated Artifact's recommendation systems post-acquisition by adapting ingestion pipelines, classification models, two-layer clustering, Bayesian user profiles, and business logic for Yahoo-scale datasets.
- Implemented multi-dimensional recall channel using geography, intent, content type, demographics, recency, engagement, and topic relevance signals; became the highest-performing Home recall channel at 4.5% CTR.
- Conducted 200+ LLM/content-classification experiments and built a Python testing suite with Weights & Biases, achieving 95% tagging accuracy and improving observability for model iteration.
- Optimized headline clustering system from 2 hours to 15 minutes, enabling near real-time news aggregation and improving freshness for users in latency-sensitive recommendation flows.
- Designed notifications-ranking algorithm prioritizing newsworthiness and personalization over content popularity, increasing CTR from less than 1% to 4%.

Yahoo! – Software Development Engineer I

Mountain View, CA — 2021 – 2022

- Designed, developed, and tested Java services to process and serve 7M+ daily documents for Yahoo properties, enabling migration from six global data centers to cloud-based infrastructure.
- Built near-real-time ranking topology in Java and Apache Storm with Redis caching for Yahoo Sports platforms, supporting low-latency feature delivery for online learning and article ranking.

Chiper S.A.S. – Data Scientist

Bogota, Colombia — May 2020 – Oct 2020

- Developed Python/SQL recommendation and pricing systems for LATAM ecommerce wholesaler using collaborative filtering, product similarity, and 50+ behavioral/product features to support merchandising and pricing decisions.

SELECTED PROJECTS & LEADERSHIP

RISING ERG – Cofounder & Global Finance Lead

New York City, NY — 2023 – Present

- Cofounded Yahoo's first ERG dedicated to early-career professionals; grew community to 800+ members across 6 countries and secured CRO sponsorship and HR budget through direct advocacy.

Praxis Society – Member

New York City, NY — 2024 – Present

- Member of builder-focused community dedicated to accelerating technological progress and supporting ambitious technology company formation.

Vertically Integrated Project ML Researcher

Purdue University — 2020

- Developed and trained PyTorch-based computer vision models to detect structural building damage and road potholes for the Indiana Department of Transportation.

EDUCATION

Purdue University – School of Engineering

West Lafayette, IN

Bachelor of Science in Computer Engineering, Minor in Economics

May 2022

GPA: 3.56/4.0 – Semester Honors & Dean's List

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Communication Networks, Computer & Network Security

TECHNICAL SKILLS & INTERESTS

Programming Languages: Python, Java, C, Rust, SQL/MySQL, JavaScript/TypeScript, MATLAB

Cloud, Storage & Infrastructure: GCP, AWS, Terraform, Docker, Kubernetes, Cloud Run, Cloud Functions, Pub/Sub, BigQuery, Bigtable, Spanner, MemoryStore

Distributed Systems & Backend: Redis, Apache Storm, Apache Beam, Dataflow, Dataproc, Airflow, REST API design, GraphQL, caching, stream processing

ML, Testing & Observability: Weights & Biases, TensorFlow, experiment tracking, production monitoring, unit testing

Spoken Languages: Spanish native, English fluent, Portuguese professional proficiency, French intermediate

Interests: Venture capital, prediction markets, trading, fintech, AI infrastructure, boxing, soccer