ALEC DINO

Software Developer | C++, Python & Machine Learning
Las Vegas, NV • alecchristiandino@gmail.com • dinoa.dev • github.com/dinoa7 • linkedin.com/in/alec-christian-dino

SUMMARY

Computer Science graduate (B.S., UNLV, Dean's List) and current M.S. student specializing in C++ and full-stack development, with applied experience in machine learning, AI model evaluation, autonomous systems, and cybersecurity (Certified Ethical Hacker). Ships performant software end-to-end, from data pipelines and algorithms to deployed applications.

EDUCATION & CERTIFICATIONS

University of Nevada, Las Vegas — M.S., Computer Science (AI & Machine Learning) Expected 2028

University of Nevada, Las Vegas — B.S., Computer Science, Dean's List May 2025

Certified Ethical Hacker (CEH) — EC-Council May 2025

Coursework: Algorithms, Data Structures, Operating Systems, Machine Learning, Internet Security, Network Forensics, Cloud Computing

WORK EXPERIENCE

Motional — Remote Vehicle Assistance (RVA) Agent, Las Vegas, NV Sep 2026 – Present

- Provide real-time remote support to driverless vehicles, reviewing live sensor and camera feeds to resolve escalated edge cases.
- Apply structured troubleshooting procedures under time pressure and document each incident for engineering review.

Handshake AI — AI Trainer (Independent Contractor), Remote Jul 2026 – Present

- Audit AI model outputs for hallucinations, unsupported claims, and reasoning errors against source material, documenting each finding in structured technical write-ups; ranked in the top 10% of contributors on the current project.

TC Medicore — E-Commerce Development Specialist (Independent Contractor), Las Vegas, NV Aug 2025 – Feb 2026

- Engineered data-driven inventory-allocation algorithms in C++ that cut overstock and understock incidents by 30% across 300+ SKUs.
- Implemented JavaScript and AI-assisted automation to review and reconcile daily inventory records in Excel, saving the operations team 20+ hours per week across tracking, forecasting, and sales analytics.
- Built custom Shopify storefront features (HTML, CSS, Liquid) that produced a 50% conversion increase within 12 weeks of launch.
- Authored standard operating procedures (SOPs) and redesigned packaging, ordering, and fulfillment workflows, leading a cross-functional team to 200% higher daily throughput.

DinoSales (Amazon Storefront) — Founder & Owner, Las Vegas, NV Jan 2024 – Sep 2024

- Generated $10K+ in Q2 2024 revenue via a data-driven product selection and pricing process: analyzed competitor pricing, sales-rank trends, and fee structures to rank products by projected margin.
- Automated repricing, inventory monitoring, and order-status tracking with custom scripts, saving 12+ hours of manual work per week.

TECHNICAL PROJECTS

F1tenth Autonomous Racing — C++, Python, ROS 2, Docker, LiDAR Fall 2024

- Designed and implemented the speed-control, automatic-braking, and collision-avoidance algorithms for a 1/10-scale autonomous race car, processing real-time LiDAR data under tight per-loop latency budgets.
- Re-implemented core control and perception routines from Python in C++, lowering per-loop execution time; deployed via Docker-isolated ROS 2 environments on a team that consistently won races.

Horse Racing Outcome Prediction — PyTorch, scikit-learn, C++ Spring 2026

- Built an end-to-end ML pipeline on large-scale Kaggle race data (feature engineering, dimensionality reduction, hyperparameter tuning, cross-validation); diagnosed and eliminated a systematic prediction bias with batch normalization.
- Wrote a C++ Monte Carlo backtesting engine that replays model predictions against historical races to evaluate betting strategies.

KOTOBA — AI Japanese Flashcard Trainer — Python, FastAPI, SQLite, Cohere API (Embed, Rerank, Command) Summer 2026

- Built a full-stack spaced-repetition trainer with SM-2 scheduling plus a compounding in-session requeue algorithm, direct import of raw Anki .apkg decks with audio, and a vanilla JS frontend.
- Implemented a retrieval-augmented (RAG-style) semantic search pipeline (Cohere Embed + Rerank over in-memory NumPy cosine similarity), including romaji queries resolved by kana round-trip validation.
- Engineered structured LLM generation for token-level grammar breakdowns and vocabulary-constrained drills: Pydantic-validated JSON contracts, retry-on-error, sentence-hash caching, and a mocked API mode powering a zero-cost pytest suite.

UNLV Parkify — Smart Campus Parking (Senior Capstone) — Arduino, Raspberry Pi, Swift, SQL Spring 2025

- Engineered the sensor-to-backend pipeline: ultrasonic sensors on Arduino/Raspberry Pi streaming live occupancy data with debouncing logic to a SQL-backed service, surfaced through a responsive web app and native iOS client (Swift); presented to industry judges.

TECHNICAL SKILLS

Languages: C++, Python, JavaScript, SQL, Swift, C#, HTML/CSS
Machine Learning & Data: PyTorch, TensorFlow, scikit-learn, pandas, NumPy, Cohere API (Embed, Rerank, Command)
Frameworks & Tools: FastAPI, SQLite, Docker, ROS 2, Linux, Git, pytest, AWS, ASP.NET MVC, Liquid, Arduino / Raspberry Pi
Cybersecurity & Networking: Nmap, Metasploit, Wireshark, tcpdump, Shodan, Censys