

Jonathan Cheng

650-787-5313 | careercheng2021@gmail.com | Los Angeles, CA | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Technologist with a strong foundation in Python, SQL, and statistical modeling, adept at designing data pipelines, ETL workflows, and cloud-based solutions. Combines analytical rigor with software engineering best practices to build scalable systems, deploy dashboards, and deliver data-driven insights. Passionate about applying AI/ML techniques to solve complex problems, with experience across prototyping to production.

EDUCATION

University of California, Santa Cruz

Bachelor of Science, Computer Science: Game Design

- Relevant Coursework: OOP Programming, Data Structures & Algorithms, C Programming & Computer Systems, Machine Learning & AI

Santa Cruz, CA

Completed

University of Southern California

Master of Science, Computer Science (Artificial Intelligence)

- Relevant Coursework: Foundations of AI, Machine Learning

Los Angeles, CA

In-Progress

PROFESSIONAL EXPERIENCE

Junior Game Developer & Community Manager

August 2024 – Present

VLO Studios

Los Angeles

- Spearheaded and developed multiple UEFN game projects, coordinating timelines and cross-functional teams (artists, designers) to deliver on creative and technical objectives.
- Collaborated on branded interactive activations with partners including Nike, Coperni, and D4VD, aligning gameplay design with brand aesthetics and marketing objectives.
- Designed and launched Fortnite experiences using UEFN (generating 100K+ impressions) and created 10+ UE5/UEFN technical guides that reduced developer onboarding time by 35%.

Marketing Data Analyst & Fullstack Developer

July 2024 – July 2025

Maple Inc

New York - Remote

- Built automated data pipelines using Python/SQL to scrape and analyze competitor data from 50+ companies, reducing collection time by 80% and allowing market updates in 30 minutes biweekly.
- Engaged in daily stand-ups to translate technical data analyses into actionable business insights for marketing teams, aligning data trends with campaign strategies.
- Documented systems in Notion with workflow guides, ensuring maintainability of automated processes and data accuracy.
- Engineered 10+ UX enhancements by collaborating with design teams, implementing Figma prototypes into responsive front-end components with accessibility compliance.

Data Engineer & Analytics Engineer

April 2023 – June 2024

Data Annotation Tech

Santa Cruz

- Built and maintained data validation pipelines for AI content moderation systems, tracking 15+ quality metrics (accuracy, false positives) via automated dashboards to monitor LLM output quality.
- Developed performance graphs comparing human/AI content decisions using Python (Matplotlib/Seaborn/Matplotlib), visualizing accuracy metrics to identify review discrepancies and reduce manual verification time by 30%.
- Conducted iterative performance testing on LLM outputs, refining training data samples through manual quality checks to improve model precision for sensitive content categories.

PROJECTS

Autonomous Racing Simulation

August 2024 – July 2024

Project Manager & Designer - Unity, ML-Agents, Reinforcement Learning, Python, C#

- Led a 5-person team in developing an AI racing system, implementing reinforcement learning to create 3 distinct difficulty levels. Directed reward function optimization that reduced erratic AI behaviors by 62%.
- Automated gameplay analytics tracking 15+ gameplay metrics (lap times, collision rates, gate times) via CSV exports for tracking.
- Committed & analyzed 1 month of training data (300+ epochs) to create technical report with visualizations, identifying key areas for AI behavior optimization.

TECHNICAL SKILLS

Programming & Development Platforms: Python (Pandas, NumPy, SciPy), R, SQL, JavaScript/TypeScript, Power BI, Tableau, Microsoft Office, Jupyter Notebooks, REST/GraphQL APIs, Data Scraping, Windows/Linux Development, WebGL, Visual Studio, Rider, VSCode, WS

Systems Design Specialization: Scalable Architecture Design, Performance Optimization, Data-Driven Development, User Engagement Analytics, API Design, Microservices Patterns, Technical Documentation, UI/UX Principles, A/B Testing Methodologies

AI Systems: Machine Learning (TensorFlow, PyTorch, Scikit-learn), Deep Learning Architectures, Natural Language Processing, Computer Vision, Reinforcement Learning (ML-Agents), Algorithm Design, Predictive Modeling, Feature Engineering, Hyperparameter Optimization

Mathematics & Physics: Linear Algebra, Calculus, Probability, 3D Math, Discrete Mathematics, Numerical Methods, Quaternions, Collision Detection

Project Management & DevOps: Technical Specifications, Document Maintenance, Patch Notes Documentation, UML Diagrams, Notion, Git, Docker, CI/CD Pipelines, Build Automation, Release Management

Collaboration & Community: Client Communications, Stakeholder Presentations, Cross-functional Coordination, Technical Storytelling, Community Management, User Feedback Analysis, Live Ops Planning, Moderation Tools