Agastya Raj Singh

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EDUCATION

University of California, San Diego Sep 2022 – Expected Mar 2027

B.S. Mathematics–Computer Science, Minor in Economics

Coursework: Probability & Statistics, Optimization, Econometrics / Analytics, Machine Learning

EXPERIENCE

Co-founder & Head of AI — SkyAI Mar 2026 – Present

India (remote) | AI analytics for SkyJumper trampoline parks

- Co-founded and lead AI development and business strategy for a CCTV intelligence platform, live at the first center and approved for rollout across SkyJumper's 30 centers in 19 cities.
- Coordinate on-site IT staff across 19 cities for installation, and work closely with a core AI and management team of 4–5 people.
- Led client work with SkyJumper's CEO, operations and software leadership, from problem discovery through proposal, go-live and rollout planning.
- Built the business case and commercial proposal, projecting ₹8–20 lakh in recovered revenue per center per year, or ₹2.4–6 crore (~$0.3–0.7M) annually across 30 centers.
- Translated computer vision output into decisions: party counts versus bookings, over-booking alerts, busy and quiet slots, and weekly reports.
- Measured against hand counts: within 2 people on 90% of 205 moments (about 1 person average error), and on 100% of 51 held-back moments at parties of up to 30 guests; flagged 4 of 4 over-booked test parties.
- Own the edge deployment path from the first commissioned Jetson node to multi-city rollout: site surveys, camera and NVR integration, RTSP capture, remote operations and per-center configuration with no branch-specific code.

Founding Computer Vision Lead (Intern) — Product & Analytics Jan 2025 – Jan 2026

Playar Inc. | San Diego, CA

- Joined at the company's earliest stage as head computer vision engineer, laying the groundwork for proprietary cricket vision software not available on the market, alongside experienced founders and a team of Qualcomm engineers.
- Combined engineering with product and management work, shaping priorities with leadership as the startup grew into an established company.
- Accelerated a match-simulation platform to real-time performance (3× speedup, ~200 FPS), enabling live analytical dashboards.
- Lifted edge-case detection reliability ~18% through pose-estimation integration.
- Worked with coaching stakeholders to turn feedback into shot-drop heatmaps for batting-academy pilots.

Computer Vision Intern — AI for Agricultural Robotics Jul 2025 – Sep 2025

Tech Mahindra | Pune, India (part-time)

- Automated harvest-readiness classification (91% mAP) and eliminated double-counting in harvest quantification.
- Reduced data acquisition cost by generating 100K+ synthetic training samples.

Lead Engineer (Intern) — Industrial Safety AI Jun 2024 – Aug 2024

VertexPlus Technologies Ltd. | Jaipur, India

- One of the lead engineers on factory safety software detecting helmets and safety vests, registering workers and managing in/out times for compliance.
- Software deployed across multiple factories and still in use today; contributed to management and business decisions alongside engineering.
- Developed real-time anomaly detection integrated with automated alerting and compliance dashboards.

Peer Educator — Academic Integrity Program Mar 2025 – Present

UCSD Academic Integrity Office | San Diego, CA

- Facilitate group sessions and mentor students through accountability processes, building communication and conflict-resolution skills.

PROJECTS

FinSight — Market Analytics & Decision-Support Dashboard Jan 2025 – Present

- Built an equity analytics platform with scenario analysis, risk decomposition and position sizing; backtested to Sharpe ≈ 1.3 and ~300 bps annualized vs SPY.
- Owned the product end to end, from data ingestion to decision-support UX for quantitative investment choices.

Playar — AI Product Delivery 2025

- Defined the user experience for a monocular cricket net-practice analyzer with coaching stakeholders, balancing latency, on-device limits and workflow for academy pilots.

TECHNICAL SKILLS

Languages: Python, SQL, C++

Analytics: Predictive Analytics, Statistical Modeling, Scikit-learn, Pandas, A/B Testing

Business: KPI Frameworks, ROI Modeling, Client Proposals, Executive Reporting, Tableau, Streamlit

ATHLETICS

National-Level Rifle Shooter — Top 10 national prospect; 3× State Champion. Olympic Gold Quest (OGQ) "Project Leap"; $120,000 training scholarship (2018–2020). Assistant Coach, Competitive Shooting Program (2019–2021).