

Pradeep Yellapu

United States | 2406107815 | pyellapu@umd.edu | [LinkedIn](#) | [Github](#) | [Portfolio](#)

SUMMARY

Lead Product Designer and Systems Architect with an M.S. in Data Science, specializing in complex geospatial interfaces, frontier ML telemetry, and high-density enterprise software. Proven track record designing preventative UI guardrails, multi-sensor observation workflows, and tokenized design systems that scale ad-hoc research prototypes into hardened platforms. Built operational software for Tier-1 aerospace clients (SpaceX, Lockheed Martin) and automated GeoAI intelligence platforms adopted across 9 international ministries.

WORK EXPERIENCE

Jeevy Fabrication (YC S25) | *Lead Product Designer & Systems Architect* | Cleburne, TX **May 2026 - Present**

- Architected end-to-end UX architecture and v1.0 tokenized design system for an enterprise OS managing \$5M+ aerospace projects, establishing strict CAD file-isolation boundaries to secure the company's largest fabrication bid from SpaceX.
- Re-engineered a fragmented supply chain into a unified interface tracking 38+ vendors and \$2.7M+ in payables, shipping a custom 10-field system mapping 4 procurement paths to enforce automated financial credit-gating controls and eliminate supplier reconciliation delays.
- Designed an industrial touchscreen kiosk interface featuring an ergonomic button layout, high-visibility data visualizations, and a rapid Spanish-language toggle to eliminate entry navigation delays for fabrication shop operators across active production shifts.
- Developed an interactive split-view visualization component in React for side-by-side blueprint verification, designing a synchronized multi-screen layout framework that unified interactive controls across Project and Quote file interfaces to cut design verification cycles by 30%.

NASA Harvest | *Product Designer & Data Researcher* | College Park, MD **Nov 2025 - Present**

- Engineered the UX architecture and automated Python/Rasterio extraction pipeline for AGRA AutoPilot, compressing a 3-day manual QGIS raster-clipping workflow into an automated 20-minute bulletin generation cycle across 9 East African ministries.
- Led on-site cognitive walkthroughs with 20+ senior agricultural officials across 6 nations in Nairobi, Kenya, translating multi-sensor satellite telemetry (Sentinel-1/2, SMAP) into plain-language executive briefs tailored for 3-minute ministerial attention spans.
- Designed a holistic data visualization layout for the YieldWatch platform, presenting an end-to-end geospatial monitoring panel built with interactive mapping layers and anomaly charts to maximize product interface design adoption among global ministry analysts.

MarketCrunch AI | *Product Design & Analytics Intern* | San Francisco, CA **Jun 2025 - Sep 2025**

- Formulated high-fidelity interface layouts and optimized call-to-action pathways for 2 major fintech analytics product launches, driving structural layout optimizations that delivered a 167% lift in user activation rates and a 40% increase in premium conversions.

Hack4Impact@UMD | *Product Designer & Data Analyst* | College Park, MD **Nov 2024 - May 2025**

- Outlined a clean user experience data schema and self-service Power BI dashboard layout to track a 750+ applicant recruitment pipeline to systematically plot internal metrics, cutting active recruiter application evaluation processing times by 80%.

Computacenter India | *Technical Analyst (Interface Optimization)* | Bengaluru, IN **Jan 2023 - Jul 2024**

- Developed an integrated script monitoring dashboard to monitor, log, and visualize server alert metrics across enterprise architecture to isolate negative interface friction trends, dropping mean incident resolution processing times by 40% across target infrastructure assets.

PROJECTS

AIM-GEO-ANOM Project Grant (Maryland Dept. of Agriculture) | *Lead UI/UX & GeoAI Developer* **July 2026 - Present**

- Co-engineered a GeoAI UI leveraging Landsat imagery and SAM to generate Maryland's first automated nutrient balance map.

EDUCATION

University of Maryland, College Park, MD, US **Aug 2024 - May 2026**

Master of Science, Data Science; User Experience (UX) Research Methods | GPA: 3.85

SRM Institute of Science & Technology, India **Jun 2019 - May 2023**

Bachelor of Technology, Computer Science & Business Systems | GPA: 3.70

SKILLS

- **Design & Systems Architecture:** Design Systems (Tokens, Component Libraries), Complex Data-Intensive Applications, Preventative UX & Error Guardrails, Information Architecture, Telemetry & Progress Design, Prototyping (Figma), WCAG / Section 508 Accessibility.
- **AI, Agents & Prototyping:** Claude Code, Cursor, Agentic Tool-Calling Workflows, Interactive Canvas Agents, React.js, TypeScript, Tailwind CSS, HTML/CSS, Git/GitHub, REST APIs.
- **Geospatial & ML systems:** STAC Metadata, Sentinel-1 (SAR) & Sentinel-2 (Optical), Receptive Fields (160m), Linear Probing & Foundation Model Embeddings, GeoPandas, Rasterio, QGIS, Zonal Statistics, Bimodal Phenology.
- **Research & Discovery:** Contextual Inquiry, Semi-Structured Interviews, Cognitive Walkthroughs, Mental Models, Usability Testing, International Field Workshops.