Srikar Desemsetti

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Education

North Carolina State University | *GPA: 3.84/4.00* — Raleigh, NC

***B.S. in Computer Science**, Artificial Intelligence Concentration* — *May 2027*

***M.S. in Computer Science** — Accelerated Bachelor's/Master's (ABM) Program* — *May 2028*

B.S. in Philosophy, Logic, Representation, and Reasoning | Minors in Mathematics, Cognitive Science, Music

Experience

AI Engineering Intern — May 2025 – Oct 2026

Parexel (full-time through Aug 2025; part-time since) — *Durham, NC*

- Built and deployed an SOP agent for an internal AI assistant serving 24,000+ employees, indexing company SOPs in AWS Bedrock Knowledge Bases so users get the right SOP and next step; later migrated it to Azure AI Foundry.
- Built the assistant's document and image upload feature: Next.js/TypeScript front end, Python on AWS Lambda.
- Led multimodal LLM evaluation; the recommended model became the company-wide production standard.
- Queried S3-stored chat logs with SQL to build validation sets that caught plausible-looking wrong answers.

Software Engineering Co-op — Aug 2025 – Aug 2026

Department of Defense (DoD) — *Washington, DC Metro Area*

Data Engineering Team — *May 2026 – Aug 2026*

- Built a PySpark pipeline over 50M+ records/day, unioning varied schemas to measure latency in under 6 min.
- Built the first end-to-end latency instrumentation, re-timing batch windows so data is ready at the start of shift.

Software Release & Analytics Team — *Aug 2025 – Dec 2025*

- Cut version-tracking errors 40% with a secure data platform unifying release metadata across dozens of teams.
- Cut incident-response time 25% with SQL/Splunk log pipelines and full-stack performance tools.

Tech Lead, Summer of AI — May 2025 – Aug 2025

Swecha Telangana — *Remote*

- Deployed Telugu NLP tooling in Python with local LLMs (Ollama) and RAG, working with IIIT-H and TASK.

Projects

Robots.txt Crawler-Policy Study | *Python, Wayback Machine CDX API, RFC 9309* | GitHub — Fall 2026

- Collected 2,598 archived robots.txt versions (2015–2026) from 19 sites, with rate limiting, backoff, and validation.
- Built an RFC 9309 parser (20 tests) for 23 AI crawler tokens; 13 of 19 sites block at least one AI crawler.

Drone Delivery Route Planner | *Python, NumPy, A*, Q-Learning, Streamlit* | GitHub — Feb 2026 – May 2026

- Built a two-layer planner: A* with replanning for routing and a Q-learning agent for dispatch and recharging.
- Benchmarked vs. greedy and random baselines on 100 seeded scenarios; matched greedy on easy grids.

NASA Lunar Autonomy Challenge | *Python, OpenCV* — Nov 2024 – Feb 2025

- Mapped a 27m x 27m simulated lunar surface by fusing 8 cameras and an IMU to 50mm elevation accuracy.

Leadership & Activities

President, Benjamin Franklin Scholars (Aug 2026 – Present; Outreach Chair 2024 – 2026): Doubled membership to 350+ scholars; secured expanded scholarship funding and honors degree designation

Music & Athletics: First trumpet with Raleigh Civic Symphony, NC State Wind Ensemble, Trumpet Choir, and Brass Quintet; proficient in 14 instruments; member of NC State Club Tennis and Pickleball

Technical Skills

Languages: Python, Java, JavaScript, TypeScript, SQL (PostgreSQL, MySQL), C, R, Bash, HTML/CSS
Data & AI/ML: PySpark, Splunk, PyTorch, TensorFlow, scikit-learn, OpenCV, RAG, MCP, BeautifulSoup, Scrapy
Cloud & Tools: AWS (Bedrock, Lambda), Azure AI Foundry, Docker, Kubernetes, Git, GitHub Actions, Jenkins, Jira