Abhiram Varma Nandimandalam

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Education

University of Arizona — Tucson, AZ
Master of Science in Data Science | Graduate Certificate in NLP | GPA: 4.0/4.0 — *Aug 2024 – May 2026*

Madanapalle Institute of Technology and Sciences — Andhra Pradesh, India
Bachelor of Technology in Artificial Intelligence and Data Science — *Aug 2020 – May 2024*

Technical Skills

Programming & Data: Python, SQL, R, Pandas, NumPy, ETL Pipelines, Microsoft SQL Server
ML & Statistics: Mixed-Effects Models, Regression, Bootstrap Methods, Power Analysis, Hypothesis Testing, NLP (TF-IDF)
Generative AI: LLMs, RAG, Prompt Engineering, Anthropic Claude, Vector Embeddings
Visualization & Tools: Tableau, Power BI, R Shiny, Streamlit, Plotly, Git, simr, lme4

Experience

Scientific Analyst – Data, AI & Bioinformatics — Jun 2026 – Present
LSCH, Department of Psychology, University of Arizona — *Tucson, AZ*

- Built an **Associational Variable Analysis (AVA) R Shiny app** implementing zero-order/covariate-adjusted associations, semi-partial R^2, incremental validity, and bootstrap indirect-association analyses
- Developed a **mixed-effects power and sensitivity app** (R, `simr`, `lme4`) for hierarchical, clustered, and twin datasets
- Built **PersonaeAI** synthetic survey pipeline (Claude, ANES 2024); achieved **33% lower** mean total variation distance vs. baseline
- Scaled an LLM-assisted literature review platform from a 20-paper pilot to **309 papers**, reducing repetitive manual extraction

Founder — Jun 2026 – Present
Stealth Startup — *United States*

- Founded an independent startup focused on developing technology-driven solutions

Graduate Assistant – Data Science — Aug 2025 – May 2026
Housing & Residential Life, University of Arizona — *Tucson, AZ*

- Built and maintained **10+ Tableau dashboards** with automated daily refreshes for housing operations and strategic planning
- Designed automated reporting workflows that cut manual reporting effort by approximately **60%**
- Applied **Python NLP (TF-IDF)** on student-care records to surface themes related to stress, mental health, and well-being

Data Analyst — May 2025 – Aug 2025
Campus Health Services, University of Arizona — *Tucson, AZ*

- Built **Tableau and Power BI** dashboards for utilization, mental health, and AOD indicators; supported initiatives tied to a **25%** survey response-rate increase
- Ran cohort comparisons and trend analyses in **Python and SQL** to evaluate student health program outcomes

Graduate Research Assistant — Aug 2024 – Aug 2025
MITHRA Lab, College of Information Science, University of Arizona — *Tucson, AZ*

- Contributed to **LLM-HyPZ**, analyzing **114,836 CVE records** with LLM/RAG methods for hardware vulnerability discovery (IEEE ICDMW 2025)
- Supported preprocessing, RAG experimentation, and evaluation contributing to MITRE's 2025 Most Important Hardware Weaknesses initiative

Data Analyst — Jan 2023 – Jul 2024
MeeBuddy – Rural India's Digital Buddy — *Remote*

- Analyzed rural engagement and adoption with **Python and SQL**; built **Tableau KPI dashboards** informing product and expansion decisions
- Translated segment insights into recommendations supporting digital-service access in rural and underserved communities