



in nitin9



Portfolio

NITIN GUPTA

✉ g-nitin | ☎ +1 803 470 9214 | @ niting1209@gmail.com | 📍 Columbia, SC, USA

EDUCATION

University of South Carolina

GPA: 4.0/4.0

M.S.: Computer Science; **Concentration:** Artificial Intelligence

Aug 2025 – May 2026

B.S.: Computer Science; **Minors:** Mathematics, Data Science

Aug 2021 – May 2025

Relevant coursework: Neuromorphic & Edge Computing, Artificial Intelligence, Machine Learning Systems,

Pattern Recognition, Big Data Analytics, Software Engineering, Database Design

SKILLS

Advanced in Python, PyTorch, CUDA, Java, C++, Sklearn, Linux, git, L^AT_EX

Native in English, Hindi, Punjabi

Intermediate in JavaScript, React, SQL, NoSQL, R, SCRUM, Apache Hadoop

Proficient in Spanish

EXPERIENCE

AI Researcher

Columbia, SC

Aug 2024 – Present

AI Institute of SC, University of South Carolina

- Led research in NEURO-SYMBOLIC AI AND NLP, focusing on planning, knowledge graphs, and multimodal AI systems
- Helped organize SAFE AI FOR SENIORS, a full-day hybrid, AAAI SPONSORED event (80+ attendees) with 8+ expert speakers
- Mentored students in research methodologies, resulting in SUCCESSFUL PROJECTS and improved experimental design
- Peer-reviewed 10+ RESEARCH PAPERS for top-tier AI conferences, ensuring quality and relevance in the field

Volunteering Ambassador

Columbia, SC

Aug 2021 – Dec 2024

Trew Friends

- Promoted ORGAN, EYE, & TISSUE DONATION through community outreach, educating individuals about life-saving donation opportunities
- Successfully persuaded OVER 300 INDIVIDUALS to register as donors on the national organ donor registry

Explainable AI Research Intern

Columbia, SC

May 2024 – Aug 2024

AI Institute of USC

- Engineered an NLP-ENRICHED KNOWLEDGE GRAPH FRAMEWORK to generate INTERPRETABLE & TRANSPARENT EXPLANATIONS for AI plans
- Conducted comprehensive TRAFFIC COLLISION DATA ANALYSIS for SC Dept. of Public Health, informing POLICY RECOMMENDATIONS and evaluating driver education effectiveness across 46 counties

Machine Learning Researcher

Columbia, SC

Aug 2022 – Apr 2024

Digital Research Services, University of South Carolina

- Performed LARGE-SCALE DATA MINING on 150+ YEARS of SC legislative records using NLP, preprocessing 10,000+ historical documents
- Trained ML classifiers to identify discriminatory Jim Crow language patterns, achieving 85%+ ACCURACY in automated historical detection

Material Analysis Researcher

Columbia, SC

Jun 2022 – Oct 2022

Jefferson Lab, University of South Carolina

- Developed C++ analysis code for magnet material simulations, yielding \$1M+ in projected research cost savings

SELECTED PUBLICATIONS

GAICo: A Deployed and Extensible Framework for Evaluating Diverse and Multimodal Generative AI Outputs

IAAI 2026

Developed an open-source evaluation library for multimodal GenAI with 13,000+ PyPI downloads in 2 months

Towards Enhancing Road Safety in South Carolina Using Insights from Traffic and Driver-Education Data

AAAI 2025

Leveraged geospatial AI to analyze statewide collision patterns and inform real-world driver education policy changes

Building a Plan Ontology to Represent and Exploit Planning Knowledge and Its Applications

Discover Data Journal 2025

Constructed the 1st comprehensive planning ontology to optimize planner selection and generate plan explanations.

Revisiting LLMs in Planning from Literature Review: A Semi-Automated Analysis Approach ...

ICAPS 2025

Built an automated trend-tracking platform to categorize research shifts and track the rapid evolution of LLMs in AI planning.

SELECTED PROJECTS

ArtEdge: Real-Time Neural Style Transfer for Mobile Devices

ArtEdge

- Developed an iOS application performing REAL-TIME NEURAL STYLE TRANSFER (NST) DIRECTLY ON-DEVICE using CoreML and edge computing

RoostAI: University-Centered Conversational Assistant

RoostAI

- Deployed a production RAG-BASED LLM CHATBOT enabling USC students to QUERY 500+ CAMPUS SERVICES through natural language

Beacon Of Hope: Personalized Meal Plan Recommender

Beacon Of Hope

- Built a FULL-STACK ML-POWERED MEAL RECOMMENDATION SYSTEM providing TAILORED NUTRITION RECOMMENDATIONS & VISUALIZATIONS

SELECTED AWARDS & ACHIEVEMENTS

AAAI Student Scholar

encouraging student participation in the AI research community

Feb 2025

McNAIR Junior Fellowship for undergraduate computer science research excellence

May 2024

Phi Beta Kappa Freshman Award for outstanding academic performance at USC.

Apr 2023