ANANTH RADHAKRISHNAN

● **portfolio** **ananthr.8299@gmail.com** **(858) 220-3225** **linkedin.com/in/ananth8299**

EDUCATION

UNIVERSITY OF CALIFORNIA, SAN DIEGO San Diego, CA

Master of Science in Computer Science & Engineering | **Teaching Assistant** for CSE-291, DSC-232, DSC 191 *Sep '23 - Mar '25*

Coursework: AI Probabilistic Learning, Recommender Systems, Algorithm Design & Analysis, Unsupervised Learning, NLP, LLM

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR Kharagpur, India

Bachelors of Technology (Honors) in Instrumentation Engineering *Jun '17 - Jun '21*

Minor in Computer Science & Engineering

Coursework: Algorithms, ML, AI, OS, NLP, Image Processing, DL,Information Retrieval,Computer Networks,Computer Architecture

SKILLS

Programming Languages & DB: C++, Python, Java, Golang, SQL, MongoDB, Redis, Neo4j, JavaScript, Node.js, HTML, CSS, C

Libraries & Frameworks: TensorFlow, PyTorch, Scikit-learn, NumPy, Pandas, Databricks, Docker, Git, REST, AWS, Teradata, Insomnia

WORK EXPERIENCE

THREDUP - SOFTWARE ENGINEER INTERN Oakland, CA

AI Software Engineer |Data Engineering Team *Jun '24 - Aug '24*

- Built a custom KnowledgeGraph (KG) & taxonomy leveraging ThredUp's inventory data, improving query efficiency by **35%**
- Implemented a custom PageRank algorithm on the KG identifying influential nodes & utilized FastRP to create vector embeddings
- Leveraged KG insights into a dynamic pricing model, improving pricing accuracy by **25%** & purchase conversion rates by **20%**
- Integrated **SuperLinked** for dynamic vector subspace creation, boosting personalized search & recommendations by **40%**

BARCLAYS - SOFTWARE DEVELOPER Chennai, India

Full Stack | Dcypher Team *Aug '21 - Jul '23*

- Developed an application that automates masking, tokenization & migration of data from PROD to Non PROD environment
- Designed a Python package to incorporate teradata to SQL server file transfer, increasing app utilization by **55%** within Barclays
- Integrated event notification, masking tools that were used by **60**+ teams(**1K**+ users) to monitor & customize their data copy tasks
- Refactored the entire codebase using OOP principles & optimized the code by revamping the application using Python, MySQL

Backend | CloudIT Team

- Spearheaded the development of CloudIT application, a service used by **875k** live consumers, using Java, Spring Boot & MongoDB
- Developed 3 REST APIs & optimized data ingestion process using multithreading, reducing response time of upload service by **40%**
- Executed legacy code migration of CloudIT, improving code maintainability by **60%** and boost in service performance by **20%**
- Collaborated with multiple product teams and handled **30%** of Barclays Document Journeys in PROD through Jenkins & Docker

BARCLAYS - GRADUATE INTERN Pune,India

ML | AI Automation Team *Jun '20 - Jul '20*

- Developed an AI-based Universal Test Automation tool using ML, enabling robust script-less large-scale testing & reducing costs
- Applied NLTK techniques to pre-process documents, achieving **93%** accuracy in early testing improving field classification accuracy

PROJECTS

Graduate Student Researcher - Graph Attention Network (DL) for Brain Mapping UCSD | *Oct '23 - Jun '24*

- Developed a novel GAT network to investigate the spatial dependencies & correlation between different EEG networks & emotions
- Designed a multimodal transformer architecture and achieved accuracy of **82%** in classifying Opioid Misusers from healthy subjects

Gitwise - LLM based VSCode Extension UCSD | *Apr '24 - Jul '24*

- Created Gitwise, a TypeScript-based VS Code extension utilizing LLMs to deliver real-time summaries and provide code insights
- Engineered to enhance productivity of user through instant display of code changes, git diffs, PR details & conversations topics

Multimodal BPR for Cold-Start Problems UCSD | *Sep '23 - Dec '23*

- Developed Multimodal-BPR recommender system using images & texts addressing the cold-start problem for enhanced accuracy
- Explored diverse fusion techniques to improve scalability for broader dataset- achieved **0.87** AUC score while testing on Goodreads

Travel Planner - Optimized Path Selection UCSD | *Jan '24 - Mar '24*

- Developed a custom path selection using DP & Dijkstra's with tree pruning, achieving a **92%** runtime reduction for complex inputs

Heuristic Guided Search Algorithms - A* IIT KGP | *Jan '20 - Apr '20*

- Developed a C++ library to perform A* algorithm & solve search problems in OR graphs. Compatible with all problem descriptions