Premnaath Varadharajan

+1 (213) 930-0803 | premnaathvaradharajan@gmail.com | linkedin.com/in/premnaath | sudo-prem.github.io

EDUCATION

University of Southern California, Los Angeles, CA, USA

Jun. 2025 - Dec. 2026

Master of Science in Computer Science

3.7/4.0 CGPA

Coursework: Analysis of Algorithms, Artificial Intelligence, Information Retrieval

Anna University - College of Engineering, Guindy, India Z

Aug. 2019 – Apr. 2023

Bachelor of Technology in Information Technology

8.97/10.0 CGPA

Coursework: Engineering Mathematics, Advanced Data Structures, Operating Systems, Computer Networks

EXPERIENCE

Oracle 🗹 Jan. 2023 – Mar. 2025

Associate Software Developer

Hyderabad, India - Onsite

- Worked on Aconex and ConjectMI products in the Construction and Engineering GBU
- Implemented a complete integration of Oracle's proprietary DataGrid component with Microsoft Excel
- $\bullet \ \ \text{Utilized thread pools in Helidon framework to handle concurrent tasks, achieving a 30\% \ reduction \ in \ loading \ times$
- Actively participated in customer meetings to brainstorm use cases and develop features tailored to their needs

Project Intern

- Handled DevOps tasks, including containerizing applications and creating deployment pipelines
- Developed a panning canvas from scratch to enable navigation across screens using mouse drag

Coral Academy ∠

(Part-Time) Jun. 2024 – Feb. 2025

Lead Backend Engineer

New York, NY - Remote

- Led a team of 4 in backend development for an early-stage edtech start-up in the K-12 segment
- Integrated Stripe for payments, Zoom for calls and optimized data handling using Supabase, Deno, and PostgreSQL
- Designed scalable database schemas and architected the application based on PRD requirements

Assurant ☑ May 2022 – Jul. 2022

Data Analyst Intern

Atlanta, GA - Remote

- Developed quality control PowerBI dashboards and conducted code reviews
- Used direct query approach to minimise time elapsed to extract and transform data from warehouse

Projects

PDF Wiser 🗹 | Python, Streamlit, LangChain

Mar. 2024 – Apr. 2024

- Developed a Streamlit web app that retrieves answers from a provided PDF using natural language processing
- Implemented Retrieval Augmented Generation that uses advanced embedding models and re-ranking knowledge graph

Multitask Offloader 🗷 | Python, xmlrpc, cProfile, pstats, Edge Computing

Feb. 2023 – Apr. 2023

- Developed a decision-making algorithm to offload computationally intensive tasks from mobile devices to edge servers
- Achieved up to a 40% reduction in computation time for large inputs, enhancing overall efficiency

Sort Visualizer 🗹 | Python, TKinter, Sorting Algorithms

Feb. 2022 - Mar. 2022

Designed a cross-platform sort visualization app with customizable animation speed, dataset size, and range

COVID Vaccinator Bot 🗹 | Python, Flask, Co-WIN Public APIs, PyTelegramBotAPI

Apr. 2021 – May 2021

• Developed a Telegram bot to expedite vaccine slot bookings by bypassing OTP delays, helping over 50 people secure slots

TECHNICAL SKILLS

Languages C++, Java, Python, TypeScript, SQL, Lua, Z Shell Developer Tools Docker, Kubernetes, CI/CD Pipelines, PowerBI

Libraries & Frameworks STL, Flask, Django, Supabase, ReactJS, Machine Learning

NOTABLE HIGHLIGHTS

- Received the AXCellence Award for the Extra Mile category from CEGBU's Vice President for FY24 Q3 at Oracle
- Won a \$150 cash prize as a runner-up in Oracle's IGIU FY24 Hackathon
- Participated in Apple's WWDC Swift Student Challenge 2022, earning a free entry ticket worth \$1000 to Apple Park, CA
- Awarded Certificate of Merit by CBSE for securing a perfect 10 CGPA in AISSE session 2015-2016
- Made contributions to <u>TLDR</u> pages, an open source community driven command line tool
- Online Profiles: LeetCode, CodeChef, CodeForces, GeeksforGeeks, Hackerrank, Stack Overflow