Manikandan Sundararaman

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EDUCATION

ARIZONA STATE UNIVERSITY

MS, COMPUTER SCIENCE

2024-2025 | Tempe, AZ

VIT UNIVERSITY, Chennai

B. TECH, COMPUTER SCIENCE

May 2021 | Chennai, India

CGPA: 3.0/4.0

SKILLS

PROGRAMMING

● JavaScript ● Golang ● Java ● C ● C++ ● SQL ● Python ● Git

FRAMEWORKS & TOOLS

● Angular ● TypeScript ● React ● Redux ● NodeJS

● Hapi ● MySQL ● PostgreSQL ● gRPC ● MongoDB

● REST & SOAP APIs ● TDD – Go & Cypress

COURSEWORK

● Software Engineering ● OOP & DSA

● Databases & Networking ● Machine Learning

● Language Models & Diffusion Models

ACADEMIC PROJECTS

● HighSight (detailed right-side) ● Number Plate Validation

● Parking Space Detection ● Snow Rush (Unity-based game)

● End-to-end Web applications

ACHIEVEMENTS

● HighSight – One of the top 30 computer science final year projects at VIT University Class of 2021

WORK EXPERIENCE

VENDASTA │ *SOFTWARE DEVELOPER*

Startup managing digital marketing for business users and agencies

Work Location: Chennai, India | Dates: March 2023 – December 2023

- **Advertising Intelligence (Ad Intel)** – *Developed and maintained features* on the Pay-Per-Click (PPC) *advertising reporting tool* by managing statistics from ad sources. *Integrated new and enhanced existing sources* such as LinkedIn, Google Ad Manager, TikTok, Amazon, Google, and Facebook Ads. *Provided documentation for managing development of new connections, and optimized code quality*.
- **CalendarHero** - *Developed and maintained features* for the *automated meeting scheduling tool* that books on both Google and Microsoft Outlook Calendars, scheduling meetings by Zoom or Google Meet. *Fixed issues and optimized code.*
- **Tech Stack** – Golang, Angular/TypeScript, gRPC, REST & SOAP APIs, SQL & MongoDB. Google Cloud – Data storage & CI/CD.

SURVEYSPARROW │ *FULL-STACK ENGINEER (PRODUCT DEVELOPER)*

Startup managing online survey experiences for B2B customers

Work Location: Chennai, India | Dates: May 2021 – Aug 2022

- **CX (Customer Experience)** – *Developed and enhanced features* in the *end-to-end surveying platform* enriching user experience for NPS (Net Promoter Score) type surveys. *Optimized team efforts by introducing design documentation.*
- **Integrations** – *Maintained codebase design patterns* for *integrations* to third-party applications such as Zendesk, Hubspot, and Active Campaign. *Improved code quality imparting best practices and performing full-stack optimizations.*
- **Tech Stack –** React, Redux, NodeJS with Hapi, PostgreSQL, REST APIs, ElasticSearch

PROJECT AND RESEARCH WORK

CASE STUDY OF LARGE LANGUAGE MODELS

- ❖ *Performance analysis* of pre-trained and publicly available LLMs encompassing *Natural Language Understanding* tasks such as *sentiment analysis, named-entity recognition, and text classification,* as well as *Natural Language Generation* tasks such as *dialogue generation, story completion, and text summarization*.
- ❖ Includes a bird's eye view of *ethical considerations* such as *bias, fairness, and privacy concerns.*

HIGHSIGHT │ *CONTENT HIGHLIGHTING AND VOTING EXTENSION*

- ❖ Designed, implemented, and tested a Chrome extension, which provides users with functionalities of
  - o *Saving text highlights and opinions* about the *quality of the content highlighted* through upvoting/downvoting, and *displayed on page load for the user community.*
  - o *Page reputation*, computed by overall votes of users, is *shown highlighting each search result title on the Google Search page* for users using the extension.
- ❖ Extended the project to a review paper titled **Comparative Studies of Page-Ranking Algorithms**, analyzing page rank optimizations associated with each.
- ❖ **Tech Stack** - Java, Spring Boot, JavaScript, Chrome Extension framework, MySQL.