## KARTTHIKEYAN NAGASUBRAMANIAM

+91-7022630062| karllsonhenry@gmail.com | Kartthik-GitHub | Kartthik-Linkedin

### ABOUT ME

As a curious and driven student, I see challenges as stepping stones for growth. I'm always ready to push my limits and improve in every project I take on. I'm especially drawn to software engineering because it lets me build solutions that make a real impact, from writing efficient code to working on full-fledged applications, and I'm excited to learn and create more.

#### **EDUCATION**

### Amrita Vishwa Vidyapeetham Bangalore

B. Tech Computer Science and Engineering Aug 2021 - Present

Coursework taken: Data Structures, Object Oriented Programming, Design and Algorithm Analysis, Machine Learning

#### Geetanjali Olympiad School Bangalore

PCMC Aug 2019 - June 2021

Coursework taken: Physics, Chemistry, Mathematics, Computer Science, English

## **New Horizon Gurukul Bangalore**

1st - 10th **Aug 2008 - June 2019** 

Coursework taken: Science, Social Studies, Hindi, French, Mathematics, Computer Science, English

#### SKILLS

**Programming Languages and Scripting:** Python, Java, C, C++, SQL, JavaScript, HTML, CSS

Operating Systems: Windows, Linux, Mac

Technical Tools: PHP, Oracle DB, React, Turtle, NodeJs

Soft Skills: Leadership, Team player, Avid Learner, Problem Solving, Communication, Adaptability

#### **EXPERIENCE**

### Integra Micro Software June 2023 - July 2023

- Worked as a Technical Intern at Integra, gaining hands-on experience in React.js and Node.js while contributing to a significant company project.
- Optimized the routing technique by 70% by implementing the Routes function in React, which improved the overall smoothness and speed of the webpage.
- Refined and streamlined code for better readability, making it easier for future developers to understand and build upon.

## PROJECTS\_

# Cold Start Movie Recommendation System, Nov 2023

- Developed a Machine Learning and Recommendation Model utilizing content-based, hybrid, and collaborative filtering techniques.
- Fine-tuned the dataset through preprocessing, achieving a 70% increase in the ML model's accuracy.
- Created a comparative matrix to evaluate the performance of different algorithms under identical conditions, enabling fair and precise assessments.

## Low-Cost Wi-Fi and Drone Jammer, Dec 2023

- Developed a jamming model using the NRF24L01 module, effectively targeting the 2.4GHz frequency range.
- Built and implemented the model with an Arduino Nano and IDE, achieving a highly functional, cost-effective solution that saves up to 60% compared to current market alternatives.
- Incorporated the NRF24L01 module to send approximately 1,000 requests per second, maximizing jamming efficiency and performance.

#### Unity Chat | React, Firebase, Firestore Oct 2024

- Developed a full-stack unified chat platform tailored for employees of an underprivileged enterprise.
- Leveraged Firebase's NoSQL database for efficient, real-time data handling, resulting in a 2x improvement in communication speed.
- Streamlined deployment processes with Firestore, achieving an 80% improvement in deployment speed

## CERTIFICATIONS

- Coincent AI offered a Web Development Course Nov 2022
- Coincent AI offered a Data Science Course May 2023
- Full Stack Web Development offered by Amrita School of Engineering, March 2023

#### **ACHIEVMENTS**

- •5th International Conference on Smart Electronics and Communication, Sept 2024 : Presented a research paper on "Low-Cost Wi-Fi and Drone Jammer".
- The 15th International IEEE conference on Computing, Communication and Networking Technologies, IIT Mandi, June 2024 Presented a research paper on "Cold Start Movie Recommendation System".
- As a technical team member of the Google Developer Student Club Bangalore, I organized and led multiple workshops and sessions on Data Science and Web Development, Jan 2023
- Secured the Best Goalkeeper Award in an all-India U18 Football Tournament, April 2019
- Secured the Best Uncapped Player Award in Super Division Football Tournament, June 2019
- Represented Amrita Vishwa Vidyapeetham University in an all-India South Zone Football Tournament, Dec 2022