# ATHREYA HOSAHALLI PRAKASH

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### **EDUCATION**

## UNIVERSITÄT STUTTGART

Stuttgart, DE

Masters in Science (M.Sc) "Information Technology"

Expected August 2025

Majors in Computer Hardware/Software Engineering

Cumulative GPA: 3.0 /4.0;

Relevant Coursework: Machine learning, Deep learning, Detection and pattern recognition, Discrete optimization

#### RNS INSTITUTE OF TECHNOLOGY

Bangalore, IN

July 2022

Bachelors in Engineering with "Honors" (B.E)

Major in Electronics and Instrumentation

Cumulative GPA: 9.1/10;

Hilfswissenschaftler (HiWi) (Part time)

Relevant Coursework: Embedded systems, ARM Microcontroller, Java, Python, Neural networks

### **WORK EXPERIENCE**

UNIVERSITÄT STUTTGART (Institut für Automatisierungstechnik und Softwaresysteme)

Stuttgart, DE

Nov 2023 - Present

- Developing Software defined cars (SoftDCar) for improved autonomous navigation and fleet functionality
- Conducting research on autonomous driving using Nav2 and building technologies towards an intelligent fleet of vehicles
- Testing advantages of various autonomous processes in a 5G environment

LIFTOFF LLC.

Bangalore, IN

Software Engineer (Full time)

Sept 2022 – Sep 2023

- Developed NodeJS based backend application development using Hapi.js framework in combination with Knex and Objection js. Achieved various levels of optimizations and library upgrades.
- Built and deployed robust and failsafe GitHub CI/CD pipelines for auto code verification and deployment.
- Designed high available, minimal latency backend architecture using AWS resources such as Elastic beanstalk, EC2, Elastic container service (ECS) etc.
- Addressed major production issues multiple times on call with minimal down-time

#### NIRAMAI HEALTH ANALYTICS PVT. LTD.

Bangalore, IN

Software Engineer

Dec 2021 – Sep 2022

- Researched on cancer risk estimation for various types using common survey data from multiple data sources.
- Synthesized and developed a convolutional neural network to achieve the above task with success in accurate prediction even in the presence of incomplete or inaccurate information.
- Conducted experiments in implementing shared task learning with methods such as multi task learning and custom training loops and loss functions
- Built a simple web application using HTML5 and vanilla JavaScript using a python flask application to achieve a usable application for use by live users.

## LITTLE HELP TECHNOLOGIES AND SERVICES

Bangalore, IN

Software Engineer (Part time)

Oct 2021 –Jul 2022

- Analyzed and designed the idea for essential software components based on the idea of the startup.
- Designed and built an android application using Android Studio to match the analyzed requirements.
- Built a simple web application using Wix and used modifications to connect web form replies to google docs.

## **UNIVERSITY PROJECTS**

## EVENT BASED FRAMEWORK FOR AUTONOMOUS DRIVING

Sep 2024

- Design, Implement and test an autonomous driving use case onto UGVs running on ROS2 and NAV2 stack.
- Set up a cloud backend system using Kubernetes for connected car functionalities and improved fleet functionalities.
- Set up a generic event-based framework to support required use cases.

# LIBRARY MANAGEMENT SYSTEM USING SPRING BOOT

Jan 2016

- Created and deployed a simple spring boot application to mimic a library management system using Java spring boot with a mySQL server as database
- APIs to satisfy basic CRUD functionality for all components of the system which was analyzed using "Object Oriented Programming" paradigm

### TITANIC DATASET ANALYSIS AND SURVIVAL PREDICTION

Jan 2016

- Analyzed titanic dataset using visualization technics and analytics to detect anomalies and fix them.
- Achieved local testing accuracies of 0.944 and testing accuracy of 0.914

### **ADDITIONAL**

Technical Skills: Java, Python, NumPy, JavaScript, Scikit-Learn. Node.JS, Kubernetes, Pandas, HTML, CSS, AWS, Machine learning, Deep Learning, Data Analytics, Android Studio, SQL, PostgreSQL, TensorFlow

Languages: Fluent in English (Reading and Writing); Basic user in German (A1)

**Certifications & Training:** Online credited courses at Indian Institute of Technology's "SWAYAM" program. Formally trained in Machine learning and Java.

**Awards:** Secured 9th rank in Bachelors in the university, academic certificate for the "best outgoing student in academics" for the year 2022.