

# SAIHARSHITH KARUNEEGAR RAMESH

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## EDUCATION

**MASTER OF COMPUTER SCIENCE**  
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

**Dec 2023**  
Illinois, USA

**B.ENG IN COMPUTER SCIENCE**  
ANNA UNIVERSITY ; CGPA : 9.54/10.0

**May 2021**  
Chennai, India

## EXPERIENCE

**SOFTWARE ENGINEER @ FRESHWORKS**  
BACK-END | JAVA | MySQL | SPRING BOOT | REST API

**July 2021 – April 2022**  
Chennai, India

- Upgraded the build tool (**Gradle**) used in the product, reducing the build time to 8 minutes from >13 minutes.
- Reduced the network traffic overload of the Freshmarketer product by >40% by changing the product's **monolith** background server to multiple layers of **microservices**.
- Reduced the processing time of the sign-up requests by 30% by making the sign-up callback an **asynchronous** process.
- Improved the email deliverability of the product by disabling the outgoing email services of new users with low spam scores, reducing the overall spam score percentage of the product by 50%.
- Introduced a separate email domain for free and paid customers by checking the version of the product that the customer has purchased.

**SOFTWARE ENGINEER INTERN @ FRESHWORKS**  
BACK-END | JAVA | MySQL | SPRING BOOT | REST API

**Feb 2021 – June 2021**  
Chennai, India

- Developed a **Staging Stack system** for Freshmarketer's test engineers where they can update and release the usage of different test stacks.
- Developed de-duplication algorithms to ensure appropriate email-deliverability metrics with the help of **Redis Cache**.
- Collaborated with the Freshsales product team and added a **new landing page feature** in the customer timeline within 2 days, meeting the customer's deadline.

## PERSONAL PROJECTS / PUBLICATIONS

**TAG-ME-IN**  
Node.js | EXPRESS | MySQL | ReactJS

- Built a **carpooling application** that helps the **University of Illinois students** to find people going to similar places and tag along with them.
- Developed the front end using **React.js** and the back end using **Node.js** and **MySQL**.

**THE DISEASE PREDICTOR**  
PYTHON | JAVA

- Built an android application that predicts different types of external diseases on eyes, skin, mouth, and nails with an image input using **Convolutional Neural Networks** with 89% accuracy. Created the dataset from scratch by web scraping.
- Won the **Most Feasible Project Award** in a 36-hour hackathon conducted by ACM, SVCE.
- [github.com/harshith2000/The-Disease-Predictor](https://github.com/harshith2000/The-Disease-Predictor)

**APPLICATION OF RANDOM FORESTS FOR AIR QUALITY ESTIMATION IN INDIA BY ADOPTING TERRAIN FEATURES**  
PYTHON | PANDAS | JUPITER NOTEBOOK

- Built a Regression model which predicts the **Air Quality Index (AQI)** of any Indian city using its terrain features with 81% accuracy.
- [ieeexplore.ieee.org/document/9315252](https://ieeexplore.ieee.org/document/9315252)

**FARMER'S BOOK**  
BACK-END | MySQL | REST API

- Built a **Web Application for farmers** through which they can trade crops, post their problems and get solutions from fellow farmers.
- Developed backend system using MySQL and connected to the Frontend using REST API.

## TECHNICAL SKILLS

**Languages** C++, Python, Java, SQL, Javascript  
**Tools & Frameworks** Git, MySQL, Spring Boot, Node.js, React.js, AWS, Linux.