# K P AATMIK

kpaatmik@gmail.com | 9447202485

github.com/kpaatmik | linkedin.com/in/k-p-aatmik/

## Skills

**Languages:** C, Java, Python

**Technologies & Tools:** DSA, OOPs, Windows, Visual Studio, Django, Operating System, ChatGPT

## Objective

Driven Computer Science student with a strong foundation in programming languages (Python, C, Java) seeking a Software Engineer Internship at ORACLE to apply my technical skills and contribute to the development of cutting-edge technology solutions.

## Project Work

- **PERSONAL VOICE ASSISTANT USING PYTHON:** VoiceMate-Python-Assistant is a voice-controlled personal assistant script written in Python.
  - ➢ Key Functionalities:
    **Natural Language Processing (NLP)**: Leveraged speech recognition (using speech recognition) to understand user commands.
    **Text-to-Speech (TTS)**: Employed pyttsx3 for voice synthesis, providing a natural and engaging interaction.
    **Contextual Awareness**: Incorporated dynamic greetings based on the time of day, fostering a personalized touch.
    **User Interaction Management**: Established a smooth user experience flow through microphone input handling, recognition, and response.
    **Offline Functionality**: Implemented features like notepad, calculator, and command prompt, empowering users even without internet access.
- **Bankers Algorithm:** This project showcases my ability to apply C programming skills to solve a critical operating systems problem (deadlock prevention).
  - ➢ Key Functionalities:
    **Deadlock Prevention**: Ensures safe execution sequences by preventing deadlock scenarios where processes hold onto resources indefinitely, hindering others.
    **Resource Request Evaluation**: Evaluate resource requests from processes, determining if granting the request would lead to a deadlock.
    **User Interaction**: Facilitates user interaction through input/output functions, enhancing usability.
    **Need Matrix Calculation**: Calculates the need matrix, a crucial component of the Banker's Algorithm, which represents the remaining resources required by processes to complete execution.
    **Safety Check Implementation**: Leverages the safety check, a core aspect of the algorithm, to ensure that granting a resource request wouldn't lead to an unsafe state.

## Work Experience

**ROBOCEK GCEK**                                                                                                    May 2024 – Present

*Treasurer*

- **Financial Management**: Ensured responsible financial management through meticulous record-keeping, budgeting, and expense tracking.
- **Robotics Workshops**: Collaborated in hosting hands-on robotics workshops, contributing to the technical development and skill-building of club members.
- **Teamwork**: Collaborated with other members to organize workshops and ensure their success.

**IEEE SB GCEK**                                                                                                    Mar 2023 – Feb 2024

*Technical Team Member*

- As a technical team member of the IEEE Student Branch at GCEK, I have had the opportunity to be involved in a variety of activities that foster technical skills and community engagement.

- **Event Coordination**: As part of IEEE Xtreme, I helped coordinate an offline output prediction competition. This involved setting up the competition environment, preparing problem statements, and managing participant registrations.

- **Mentorship**: During the competition, I provided guidance and support to participants, helping them understand the problems and navigate any challenges they encountered.

- **Evaluation**: After the competition, I was involved in the evaluation process, reviewing submissions and determining winners based on the accuracy and efficiency of their solutions.

## Education

**GOVT College of Engineering, Kannur**
BTech in Computer Science and Engineering                                    *Graduation:- 2026*
Relevant Coursework: Object Oriented Programming, Discrete Maths, Data Structures and Algorithms, Operating Systems,

## Volunteering Experience

- **Mentor at ROBOCEK GCEK:** Helping students to get better at programming, hardware implementation in robotics, etc
- **Team Coordinator**: Hosted various hands-on workshops for students excelling in problem-solving.

## Additional Information

- Language:- English, Malayalam
- Nationality:- India
- Address:- Aaramsatha house, Kombankallu Kalam, Chathamangalam post, Nemmara, Palakkad, Kerala,678508