BASIL BENNY

+919847623589 | basilbenny404@gmail.com | linkedin.com/in/basil-mannekudi | github.com/basilmannekudi

Education

Bachelor of Technology	**A. P. J. Abdul Kalam Technical University**	*Vazhakulam, Kerala*	**2019 - 2023**

- Electronics and Communication Engineering
- Viswajyothi College of Engineering and Technology
- Relevant Courses: Mastered Computer Architecture and Microcontrollers, Excelled in Digital Signal Processing, Designed Complex Logic Circuits
- Achieved a GPA of 7.8

Skills

Technical

- Spearheaded Arduino Development (Various Development Boards) and Mastered Arduino IDE | Leveraged Espressif Development Boards (ESP) with Proficiency in C++ | Designed and deployed IoT solutions, showcasing proficiency in configuring boards and developing drivers | Demonstrated Expertise in H-Bridge, Logic Gates, Logic Circuits, Combinational Circuits, and Sequential Circuits
- Excelled in Android Development, Proficient in Java, Google Firebase, Python, and Git

Soft Skills

- Demonstrated strong communication and exceptional teamwork | Ability to work collaboratively and independently | Ability to Lead | Ability to solve problems effectively | Exhibited a strong ability to solve complex problems

Projects Experience

Smart Sprinkler   **Jan 2022 - Mar 2023**

- Spearheaded the creation and successful deployment of a state-of-the-art Smart Fire Extinguishing System, leveraging automated fire detection technology to achieve a 50% reduction in emergency response time, minimizing property damage by 20%.
- Led the system using Arduino Uno as the controller
- Implemented an advanced Haar Cascade Algorithm for fire detection; achieved a 65% accuracy rate in fire detection

IoT Rodent Box   **Jun 2021 - Aug 2022**

- Created and executed an IoT solution using C++ and Firebase, enabling immediate notification of rodent captures in cages; reduced response time by 75% and ensured timely pest control measures
- Employed Esp32 microcontroller and Hall Sensor for precise detection
- Designed a scalable backend infrastructure using Google Firebase real-time database, optimizing data retrieval and storage processes; Improved system performance by 30% and enhanced user experience
- Managed the development of an innovative Android App that seamlessly integrated user notifications, resulting in a 95% reduction in missed notifications and an overall improvement in user satisfaction and app ratings

Gate Checker   **Sept 2020 - Oct 2021**

- Developed a gate checker system to test AND, OR, XOR, NAND, XNOR gates in integrated circuits
- Utilized Arduino for control and employed C++ for programming, incorporating a user-friendly LCD display to provide real-time results
- Detected and displayed faulty gates for efficient troubleshooting
- Highlighted proficiency in hardware-software integration
- Showcased problem-solving abilities in gate testing and fault detection

Android projects Experience

- Orchestrated the Gate Authentication System, optimizing entry and exit processes through token generation in an Android app; reduced entry/exit times by an average of 20%
- Created the Stories by Pete Android application, leveraging Android Studio, Java, and Firebase

Mentorship   Jul 2022

- Led and facilitated a highly interactive Arduino hands-on training session in collaboration with IEDC VJCET, equipping 30+ participants with practical skills in hardware prototyping and programming, fostering innovation and entrepreneurship in the local community

Leadership Experience

- **FindMeQR:** Led a team of 4 in developing and pitching a device and mobile application solution, enabling efficient tracking and retrieval of personal belongings.