MARK AONDOHEMBA ORTESE ©

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SUMMARY

I am a third-year Computer Engineering student at C. V. Raman Global University, India, with a strong passion for exploring and building with modern technology. I am always seeking opportunities to enhance my skills and grow in areas where I can further develop and make meaningful contributions. My interests include the internet of things (IoT), computational health, networking, and machine learning. I am proficient in Java, Python, C, and C++, and I have hands-on experience in printed circuit board (PCB) design. I am open to collaborating, sharing ideas, and working on innovative projects that contribute to technological advancement.

EDUCATION

B.TECH. Computer Engineering

Expected year- June 2026

C. V. Raman Global University, Bhubaneswar, Odisha, India

TECHNICAL SKILLS

Technical Skills: Hardware Design and Embedded Systems, Data Analysis, Computational Modeling, Machine Learning, Programming and Software Development, Cryptography, PCB Design

Programming Languages: Java, Python, C, C++, Front-End: HTML, CSS Tools, Databases, and OS: Cisco Packet Tracer, Altium Designer, KiCad, GitHub, Windows, Linux/Ubuntu, Microsoft Office, VS Code

PROJECTS

Game Development (Alien Invasion) Using Python, July 2023

- Game Framework: Designed and developed the game using pygame library for seamless graphics and animations.
- Collision Detection: Programmed robust collision detection algorithms for interactions between player bullets, aliens, and obstacles.
- Dynamic Levels: Created progressive difficulty levels with increasing alien speeds and wave complexity to enhance player engagement.
- Custom Graphics: Designed and integrated custom assets, including sprites and backgrounds, to enhance the visual appeal.
- Scoring System: Developed a real-time scoring mechanism to track player performance and high scores.
- Sound Effects: Integrated sound effects for shooting, collisions, and background music for an immersive experience.

Web Development (E-Commerce Website), Aug 2023

- Responsive Design: Created a mobile-friendly responsive user interface for seamless navigation.
- Backend Development: Developed a robust backend using Django (Python) to handle product catalogs, orders, and user management.
- Database Integration: Designed and implemented a scalable database using MySQL for efficient data storage and retrieval.
- Payment Gateway Integration: Integrated secure payment gateways to enable online transactions.
- Product Filtering and Search: Implemented advanced filtering, sorting, and search functionalities for a better shopping experience.
- Security Measures: Ensured data security by implementing user authentication, encrypted transactions, and protection against common vulnerabilities like SQL injection.

Machine Learning-Based Disease Prediction Model

- Built a predictive model to determine the likelihood of diseases like diabetes and heart conditions using Python, Pandas, NumPy, Scikit-learn, TensorFlow, Matplotlib, and Jupyter Notebook.
- Analyzed and cleaned healthcare datasets (e.g., Pima Indian Diabetes dataset and UCI Heart Disease dataset).
- Employed classification algorithms (Logistic Regression, Random Forest, Support Vector Machines).
- Visualized key risk factors using data visualization techniques, like bar charts.
- Utilized various machine learning techniques like Decision Tree, Support Vector Machine (SVM), and Neural Networks to improve prediction accuracy and model performance.
- Evaluated the model's performance using metrics like accuracy, precision, recall, and F-1 score, and optimized the model using cross-validation techniques.

WORK EXPERIENCE

Customized Deep Neural Network (DNN) For Intrusion Detection In Internet Of Everything (IoE) - Ongoing project

Computer Engineer and Service Provider, Barnamfel Service Center $Feb\ 2020\ -\ Nov\ 2022$

- Provided personalized computer services and technical support to over 50 clients, building strong relationships and ensuring their systems ran smoothly, which led to improved productivity and satisfaction.
- Served as Network Administrator for 10+ firms, managing network infrastructure, troubleshooting connectivity issues, and ensuring secure and reliable operations.
- Conducted hardware and software installations, upgrades, and configurations to enhance system efficiency and reliability for clients.

ACTIVITIES

Organization and Project Management, FGCV Alumni, Oct 2021

- Consistently organized and facilitated alumni meetings, engaging over 200 students, fostering a collaborative environment that encouraged knowledge sharing and community building.
- Led fundraising initiatives to support alumni events and scholarship programs, achieving set goals within deadlines.
- Established a coding community within the alumni network to share resources, host hackathons, and encourage innovation.
- Organized programs like visits to orphanages, hospitals, and community centers under religious initiatives.

AWARDS/HONORS/GRANTS/FELLOWSHIP

- Study in India (SII) Scholarship, 2022.
- Students Leadership Excellence Award, 2024.
- Outstanding Open Source Contributor Award, C.V. Raman Global University, 2024.
- Most Valuable Player (MVP) University Football Team, 2023.