

## KRITARTH DANDAPAT

Full Stack Developer, AI Enthusiast

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### PROFESSIONAL SUMMARY

Driven innovator with proven expertise in AI and software development, notably at the University at Buffalo, where I spearheaded AI dental health solutions and enhanced student learning in Statistics. Skilled in React and Python, I excel in creating impactful technologies and fostering team collaboration, achieving significant advancements in both academic and health tech sectors.

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### EDUCATION

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#### BACHELOR OF SCIENCE IN COMPUTER SCIENCE

University at Buffalo

GPA: 3.974

May 2026

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### WORK EXPERIENCE

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#### Research Assistant -ESC LAB

University at Buffalo

Jun 2024 – Present

Buffalo, NY

- Worked on developing AI for advanced dental health solutions.
- Supervised by Professor Wen Yao Xu, contributing to AI integration in dental health technologies as an intern.
- Developed mobile and web applications for a dental health platform with Professor Xu using React Native and React.
- Utilized YOLO-based object detection for improved automation in advanced applications.
- Engineered systems to track oral health metrics, offering customized suggestions for improvement.
- Streamlined processes to achieve a 30% reduction in load durations.

#### Tutor and PAL Leader – Tutoring and Academic Services

University at Buffalo

August 2024-Present

Buffalo, NY

- Led two 1-hour sessions per week, increasing student comprehension of Statistics concepts by 30% as measured by quiz scores and feedback.
- Created over 10 customized worksheets and exercises, boosting class participation by 25% and improving overall engagement.

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#### FOUNDER AND VICE PRESIDENT

UB NSDC(NATIONAL STUDENT DATA CORPS)

OCT 2023 – Jan 2024

- Facilitated teamwork in **NSDC website co-development**, promoting effective event planning and meeting coordination.
- Spearheaded the launch of the NSDC website, streamlining event planning and boosting team coordination.

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### PROJECT

- **People Counting using CSRNet:** Implemented deep learning model using CSRNet for accurate people counting in highly congested scenes, improving detection accuracy and performance in complex environments.
- **Human Emotion Detection using Vision Transformers:** Developed emotion detection system utilizing CNN, ResNet-34, and Vision Transformer (ViT) for emotion classification from images, achieving 87.5% accuracy. Combined multiple deep learning techniques to enhance system performance.
- **Pathfinding Visualizer using A\* Algorithm:** Created interactive pathfinding visualizer with Python and Pygame, implementing the A\* search algorithm for dynamic grid-based pathfinding visualization. Enhanced user experience with a customizable graphical interface.
- **Personalized Student Shell (PSS):** Designed command-line shell for students to enhance workflow, task management, and learning. Integrated features such as custom aliases, command history, auto-completion, code execution, tutorials, error suggestions, and API integrations. Added gamification elements like command challenges and leaderboards to encourage continuous learning.

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### SKILLS

**Languages and Technologies:** Python, Java, JavaScript, C/C++, Rust, HTML/CSS

**Frameworks and Libraries:** React, React Native, Django, Node.js, Express, PyTorch, TensorFlow

**Tools and Databases:** Firebase, SQL, MongoDB, Git/GitHub, Tailwind CSS, Figma

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### CERTIFICATIONS

- **Machine Learning Specialization** by Stanford University & DeepLearning.AI on Coursera.
- **Deep Learning Specialization** by Stanford University & DeepLearning.AI on Coursera.