Chetanya Anil Rathi

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Summary

Results-driven Software Developer with hands-on experience in full-stack development, cloud systems, and AI/ML projects. Proficient in React.js, MongoDB, AWS, and Python, with a proven ability to design and deploy scalable, data-driven applications. Experienced in optimizing performance, improving reliability, and enhancing user engagement through modern technologies.

Education

Syracuse University, Syracuse, New York, United States — GPA: 3.5/4
Master of Science in Computer Science — May 2026
Coursework: Machine Learning, Operating Systems, Algorithms, NLP, DBMS, Architecture

Savitribai Phule Pune University, Pune, India — GPA: 3.7/4
Bachelor of Technology in Artificial Intelligence and Data Science — May 2024
Coursework: Cloud Computing, Web Technology, Computer Networks, Deep Learning

Technical Skills

Programming: JavaScript (ES6+), Typescript, C++, HTML5, CSS3, Java, Python, PHP, Git
Frameworks: React, HTML, Next.js, Linux, Tailwind CSS, OpenCV
Backend & DB: Nodejs, Flask, REST APIs, SQL, MongoDB, PostgreSQL, MERN Stack
DevOps & Cloud: AWS Lambda, AWS RDS, AWS S3, CI/CD Pipeline

Professional Experience

Software Developer Intern — Jan 2024 - May 2024
Main 10 – Maintenance Management Tool — Pune, India
- Engineered a responsive full-stack web application with React.js and MongoDB, reducing data retrieval time by 25%.
- Integrated AWS S3 for scalable cloud storage, improving system resilience and enabling backups with faster data recovery
- Automated workflows using AWS Lambda and implemented AWS RDS (PostgreSQL), enhancing real-time alerting and increasing query accuracy by 35%.

Software Engineering Intern — June 2023 - Dec 2023
Hum Aspen Wellness Private Limited — Pune, India
- Enhanced the Now Zone Life wellness app by improving UI/UX with React.js, driving a 35% increase in user engagement
- Optimized NoSQL (MongoDB) databases, improving data accuracy by 50% and reducing query execution times by 30%
- Automated and executed 150+ test cases, identified 30+ critical bugs, and raised overall software quality by 30%

Projects

EECS Hackathon, Syracuse University | *Flask, Python, Artificial Intelligence, Machine Learning* — Mar 2025
- Award-winning (1st Prize) automated grading system that cuts manual grading time by 60%
- Improved fairness using NLP-based expertise matching and constraint-based scheduling
- Built a Flask web app to process 500+ assignment submissions in real time
- Integrated web scraping of faculty research data and structured reporting, increased assignment-matching accuracy by 40%

Personal Portfolio Website | *React, Vite, Tailwind CSS* — Sep 2025
- Deployed adaptive portfolio with animations and lazy loading, achieving 100 Lighthouse score and 3s load time
- Drove visitor engagement by 30% through enhanced UI/UX design and performance optimizations

Tweet AI-Generated Text Detection | *BERT, Python* — May 2025
- Deployed a BERT-based classifier to distinguish AI-generated tweets from human-written text with 96.81% accuracy
- Implemented advanced preprocessing, tokenization, and fine-tuning techniques to optimize model performance and reliability

Voice Cloning and Forgery Detection | *Wave GAN, Spec GAN, DC GAN* — Mar 2024
- Developed a deep learning model to generate realistic audio signals and detect forged speech samples with 95% accuracy
- Integrated Wave GAN, Spec GAN, and DCGAN techniques, boosting detection precision by 20% and improving across datasets.
- Leveraged advanced signal processing, feature extraction, and optimization to enhance robustness against diverse scenarios

Computer Activity and Monitoring System | *MERN, OpenCV, Java* — Dec 2023
- Designed and deployed a real-time monitoring system to track web activity, block unauthorized content/apps
- Built a MERN stack dashboard integrated with OpenCV for image processing, increasing monitoring accuracy by 40%.
- Added a Java-based compatibility module, enabling seamless multi-platform support and system scalability.

Extracurricular Activities

- Project Lead for the AI Club at the EECS Department, Syracuse University.
- Published Paper - Voice Cloning and Forgery Detection using Wave GAN and Spec GAN, IEEE (Link)