Edward Chen

nyc.chen.edward@gmail.com | [LinkedIn](#) | [Portfolio](#)

EDUCATION

Stony Brook University (SUNY)   **Stony Brook, NY**
Bachelor of Science in Computer Science | Applied Mathematics and Statistics   *Aug 2021 – May 2025*
Relevant Coursework: Software Engineering, Data Structures, Analysis of Algorithms, Object-Oriented Programming, Machine Learning, Data Science, Numerical Analysis, Computational Geometry

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C, HTML, CSS, R
Frameworks/Libraries: React.js, Node.js, Express.js, Flask, FastAPI, Material-UI
Developer Tools: Git, GitHub, Gitlab, VS Code, Azure DevOps, VIM, Docker, Office 365
Databases: MongoDB, DynamoDB, Firebase, PostgreSQL
Interests: Powerlifting, Basketball, Diving

PROJECTS

Weather Tracker | *Flask, JavaScript, PostgreSQL, OpenMeteo*   **Jul 2025 – Aug 2025**
- Deployed a Flask web application with PostgreSQL database design, implementing user location management and data caching for 100+ user accounts
- Engineered RESTful API integration with OpenMeteo for real-time weather data, reducing average response time by 60% through data processing optimization
- Developed responsive dashboard displaying 168+ hourly data points per forecast cycle, featuring interactive visualizations and historical monthly weather comparisons

NBA Analytics Dashboard | *React, Node.js, LightGBM, MongoDB*   **Jun 2025 – Aug 2025**
- Launched a MERN-based web platform featuring 400+ NBA player statistics, interactive leaderboards, and dynamic data visualization components
- Built comprehensive data visualization features to support user-defined statistical formulas and metrics
- Integrated a machine learning pipeline using LightGBM achieving 85% prediction accuracy on player performance forecasts with custom feature engineering
- Enhanced user engagement by 40% through interactive player comparisons and drill-down capabilities, reducing average session bounce rate

Automated Process Manager | *JWT, Socket.IO, Cron, MongoDB*   **Mar 2024 – May 2024**
- Built a full-stack web application managing 300+ user accounts with real-time resource allocation, room scheduling, and automated roster management
- Automated operational workflows reducing manual processing time by 70% through MongoDB query optimizations and customized cron job scheduling
- Designed modular architecture supporting 5+ business sectors with 90% code reusability using agile development practices
- Implemented JWT authentication with role-based access and Bcrypt encryption, securing 1,000+ daily user sessions
- Integrated Socket.IO for real-time notifications and messaging, enabling instant updates across 100+ concurrent users

EXPERIENCE

IT Operations Specialist   **Aug 2022 – May 2025**
Stony Brook Campus Residences   *Stony Brook, NY*
- Provided technical support during events for 200+ students across campus facilities
- Coordinated logistical arrangements and managed Brightspace, Echo360 and audiovisual system operations
- Maintained reliable performance of classroom technology and computers for daily use and events
- Monitored network performance and system health across campus facilities, ensuring 98% uptime for IT infrastructure

Teaching Assistant   **Aug 2023 – Dec 2023**
Stony Brook University   *Stony Brook, NY*
- Instructed laboratory sessions for 30+ students covering Java programming fundamentals, recursion, and polymorphism concepts
- Managed Piazza Q&A platform responding to 100+ student inquiries, providing comprehensive course support and assistance
- Facilitated exam administration and grading procedures in collaboration with the professor to maintain academic standards