# Kinshu Gupta

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#### EDUCATION

#### Quinnipiac University

Bachelors in Computer Science and Applied Statistics (GPA: 3.99)

Hamden, Connecticut

Aug 2021 - May 2025 (Expected)

#### Work Experience

#### International Game Technology

Software Architecture Intern

Providence, Rhode Island

Jun 2023 – Aug 2023

- Maximized casino player engagement and retention by developing real-time transaction processor (TXP) using Drools rule engine to consume complex player session events and provide intelligent offering feedback
- Simulated 50,000+ parallel Electronic Gaming Machines (EGMs) to stress test and forecast CPU and memory usage of TXP hosted on EC2 by building multithreaded game session generator and pushing sessions to RabbitMQ
- Created dashboard for efficient management of virtual client simulator by developing REST API using Spring Boot
- Performed integration testing for EGM simulator, TXP, database, and AWS SageMaker machine learning endpoint

#### QU Office of Academic Innovation & Effectiveness

Hamden, Connecticut

Sep 2022 - Present

- Research Assistant
  - Co-author of longitudinal cohort study analyzing and building predictive model to reveal impact of student psychoeducational variables on quantitative literacy and written communication scores (in progress)
  - Consolidated multi-decade, cross-university longitudinal study data from 25,000+ students using NumPy, Pandas, TensorFlow, and Sentence Transformer models for Natural Language Processing

## Extracurriculars & Projects

#### Carbon Offset Credits Exchange | Developer

- Won 3rd place among 100+ Hack4Delta hackathon participants by building platform to trade carbon credits as an asset, thereby providing financial incentive for sustainable investing
- Conceptualized blockchain solution to enhance transparency and community engagement in carbon exchange while minimizing the need for intermediaries

#### Founding M&T Bank Partnership Lead for Quinnipiac Computing Club | President

- Organized 2021 and 2022 hackathons, securing M&T Bank sponsorship & managing a 50+ member club budget
- Won first-place 2021 hackathon team prize as general member by building Python, React.js web app to visually plan nutrition intake, utilizing publicly available data and guidelines set by the World Health Organization

### **Democracy Front** | Co-Founder

• Successfully qualified for 2nd round pitch to Pear Venture Capital at Harvard by developing political fundraising app to provide legislative information and enable grassroots donations to candidates, parties, PACs, and NGOs

#### Athena Surveillance Object Detection | http://athena.kinshug.com

- Built surveillance analytics system to scrape live feeds from commercial venues and provide foot traffic analysis
- Integrated YOLOv5 model via PyTorch API for object detection; stored events in PostgreSQL on Amazon RDS
- Developed Flask API and React-based frontend, both hosted on EC2 instances, for interactive data querying and live display; used AWS Lambda for scraping and S3 for storage

#### Stock Network Analysis | https://stock-network-analysis.herokuapp.com

- Developed portfolio diversification tool by selecting minimally connected stocks using graph centrality measures
- Visualized correlation graph in React webapp using Fruchterman-Reingold layout, deployed with Heroku CI/CD

#### Amazon Alexa Hackathon | Participant

• Won prize for successfully building & deploying voice assistant app to quiz and review STEM topics, utilized Node.js, AWS services, and passed Alexa store launch requirements

#### SKILLS

Programming Python, Java, JavaScript, C, R, SQL Technologies Arduino, Raspberry Pi, Git, Selenium, React Certifications TensorFlow Machine Learning, AWS Developer Associate