Shubham Yadav

shubhamy.04@outlook.com | (518) 334-4005 | Boston, MA | www.shubhamy.com | [GitHub](#) | [LinkedIn](#)

EDUCATION

Northeastern University, Boston, MA   *September 2022 – Expected May 2026*
Khoury College of Computer Sciences – *Candidate for Bachelor of Science in Computer Science*
Relevant Coursework: Algorithms and Data, Object-Oriented Design, Foundations of Data Science, Computer Systems, Discrete Structures, Mathematical Reasoning, Mathematics of Data Models, Software Development

Awards and Activities: Dean's List 2023, Students for the Exploration and Development of Space (SEDS)

COMPUTER KNOWLEDGE

Languages: Java, Python, C++, JavaScript, Go, C#, TypeScript, HTML, CSS
Frameworks: React.JS, React Native, Redux
Tools & Platforms: Firebase, Git, UiPath, AWS (S3, Lambda), Linux, PowerShell, MySQL, Postman, Azure
Interests: Robotics, Sports, Teaching, Meditation, Biographies, Music, and Fashion Design

EXPERIENCE

Citizens Bank *(Current)*/ Boston, MA   *July 2024 – Present*
Software Developer Co-op
- Enhancing automated loan onboarding process for Home Equity loans through the integration of python in UiPath workflows, reducing manual efforts and increasing processing accuracy.
- Developing scripts with automated testing protocols to extract and integrate loan data from Empower to ALS, leading to a 30% reduction in processing time and improved data accuracy.

Karma Solar | Remote   *June 2023 – August 2023*
Software Engineering Intern
- Analyzed API and customer data using Python and Pandas to pinpoint rural adoption bottlenecks, identifying actionable insights that are projected to drive an 8% increase in customer acquisition in underserved areas.
- Engineered and optimized MySQL databases and data pipelines for collecting, sorting, and analyzing solar panel performance data, streamlining the data analytics process.
- Designed and executed comprehensive API testing using Postman and Go, incorporating manual and automated tests.

PROJECTS

Advanced Real-Time Facial Anonymization Engine | *C++, ReactJS, WebRTC, Node.js, Kubernetes*
- Led the development of a low-latency C++ video processing engine for real-time facial anonymization, advancing privacy standards in digital media, surveillance, and research.
- Advanced the engine's global utility by incorporating IP-Stream, scalable cloud-based REST API and a robust full-stack interface, expertly orchestrated via Kubernetes for scalable, high-availability deployment.
- Integrated a high-performance face selection tool, utilizing multi-threading, allowing users to dynamically toggle anonymization and persistent tagging in video streams for seamless real-time anonymization control.
- Engineered adaptive streaming algorithm to enhance stream efficiency, addressing diverse network conditions.
- Outperformed OpenCV's standard by developing a proprietary classifier.

Expex | *Firebase, Express.js, React, Node.js, Plaid API, Redux Toolkit*
- Co-developed a robust full stack personal finance web application facilitating users in merging financial accounts from over 12,000 different institutions into one secure dashboard.
- Designed UI with simplicity and clarity, ensuring the platform's features are easily accessible and intuitive.
- Implemented and deployed REST API endpoints on AWS Lambda for efficient processing, paired with a machine learning model that achieves 96% accuracy in receipt data extraction.
- Awarded $6000 by Americas Small Business Development Center for R&D to bring Expex to market.

Crop Yield Prediction Using Satellite Imagery | *Python, Google Earth Engine, SciKit Learn |* *[Publication](#)*
- Engineered an embedded system, using an Arduino microcontroller and array of sensors, to predict crop yield using 1000s of data points from satellite imagery, soil, and climate data.
- Harnessed neural networks to create a prediction model with 92% accuracy.
- Showcased research at the International Spellman HV Competition and placed top 10 out of 600 competitors - awarded $1000 & $200 Research Stipend.