

Ayush Sharma

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EDUCATION

Bachelor's of Science in Computer Science & Minor in Mathematics at Georgia Institute of Technology **December 2023**

Technical Skills: Java, Python, C++, AWS, MongoDB, TensorFlow, React Native, Node.js, Apache Kafka, Jira, PowerBI

Other Skills: Agile, CI/CD, Product Design, Stakeholder management, User Research, and Quality Assurance Testing

Activities: Georgia Tech Soccer Club, CEISMC, Trading Club, Undergraduate Consulting Club, Product Management Club, Poker Club

PROFESSIONAL EXPERIENCE

Senior Research Engineer: Georgia Tech Research Institute – Atlanta GA **(August 2021 – Present)**

- Managed a team of 6 undergraduate students to produce a smart drone with L3Harris to help Cisco Systems strengthen weak cellular 5G areas in Bobby Dodd Stadium.
- Responsible for efficiently analyzing and cleaning geospatial data gathered from multiple GPS sensors in Bobby Dodd.
- Gathered, arranged, and corrected research data to create representative graphs and charts highlighting results for presentations for L3Harris and Cisco Systems sponsors.
- Increased geospatial accuracy by 30% by incorporating TensorFlow CNN in Python source code architecture.

Software Engineer Intern: Nike – Beaverton, OR **(June 2023 – August 2023)**

- Integrated an Apache Kafka streaming data pipeline with Amazon MSK in a business metrics dashboard to provide live shipping updates for Nike's Customer Order Management platform and reduced \$10.8MN yearly in shipping fees.
- Performed Quality Assurance Testing (QAT), Integration testing, and A/B testing of the data pipeline via AWS Lambda.
- Revamped API endpoints with TypeScript to optimize data flow for PostgreSQL architecture to reduce latency between the time the products are ordered, and the order shipping information is emailed to the customer by 4 seconds, or 50%.
- Prototyped Nike Glimpse, jerseys with an in-built camera, to bring sport fans a 1st person point of view from an athlete's perspective – placed 4th out of 28 teams for highest potential to scale Nike's earnings by 200% in the next decade.

Technology Consulting Summer Associate: PricewaterhouseCoopers – New York City, NY **(May 2022 – August 2022)**

- Directed discussions between executives and operations staff of two client engagements valued at \$6.3MN by leading joint discussions and performing stakeholder analysis.
- Spearheaded noSQL database migration from AWS DynamoDB to Azure Cosmos DB for Fortune 100 Walmart inc.
- Piloted and implemented an innovative IT architecture reorganization to reduce server maintenance costs by 45% in Goldman Sachs Consumer & Investment Management Operations low-latency trading systems.
- Actively managed engagement progress and financials, issuing new budget proposals, and leveraging strong client relationships between PwC and Goldman Sachs executives.

Product Management Intern: U.S. Bancorp Investments – New York City, NY **(Jan 2021 - August 2021)**

- Lead technical development of Azure CosmosDB provisioning for an advanced cybersecurity application, Decentralized Identity Pilot (DIP), to prevent fraudulent activity on U.S. Bancorp Investment Management Group (IMG) clientele portfolios.
- Delivered business case whitepaper to senior U.S. Bank executives showcasing the impact of DIP in assisting to secure more than 18.7 million clients' data and more than \$8.7 billion in assets.
- Collaborated with team of interns in prioritizing KPI, creating user stories, writing product documentation to test new functionality, and conducting Quality Assurance Testing for Cross Border, an international financial transaction application.
- Deployed AWS SageMaker model to analyze risk-adjusted returns for IMG clientele portfolios.

Software Engineer Intern: Northrop Grumman Defense Systems – Atlanta, GA **(May 2020 – August 2020)**

- Developed a Microsoft PowerApp for the Centers for Disease Control and Prevention (CDC) Public Health Department which handles automated testing with PowerBI, PowerAutomate and Python.
- Lead a team of 3 interns to design a second PowerApp for the CDC Prevention Research Center to allow users to add research projects for the Department of Non-Infectious Diseases.
- Implemented a REST API and interactive United States Map to automate facts sheets for all 50 US States for the Office of Smoking & Health.
- Contributed on COVID-19 Data Tracker with CDC Data Scientists. Wrote primarily with NumPy and Python.

PROJECTS

Stock Market Forecaster

- LSTM-based Recurrent Neural Network (RNN) model to determine long-term stock and bond gains based off U.S. financial market data from the past 150 days funneled from the yahoo finance API.
- Executed forecast model for personal investment portfolio of \$2,500 with a 250% portfolio value increase in 6 months.

Kast Xtra

- React Native web-based product designed to assist event planning firms with volunteers' registration and ticket sales.
- Established track record of aiding 5 events with more than 250 volunteers, and \$36K in revenue combined from all 5 events.

Seattle Real Estate Predictor

- Collaborated with a team of undergraduate students to derive multiple working prediction models using machine learning techniques and quantitative analysis for best accuracy when calculating approximate real estate pricing in Seattle, WA.
- Engineered core algorithm of the random forest regression model to predict real estate market values within 10% margin error.