

# Deeshan Wassan

📍 New York, New York ✉ deeshan.wassan@nyu.edu ☎ (267) 441-1825 🌐 in/deeshan 🌐 deeshanw.com

---

## EXPERIENCE

---

### Amazon

#### Software Engineer – AWS Marketplace Payments Compliance

May 2024 – Present, New York, NY

- Transitioned to AWS Marketplace Payments Compliance to work on higher-impact internationalization projects, contributing to over \$6 billion in direct revenue impact.
- Led the design and implementation of a multi-catalog solution for international payments compliance, developing the core components in Java and TypeScript, enabling support for new AWS Dedicated Cloud regions.
- Created a project plan to automate customer verification workflows using AWS AI services such as Textract for OCR, Rekognition for facial recognition, and Macie for PII detection.
- Trained Amazon Q on Bedrock with the team's entire codebase and documentation, improving developer productivity and reducing ramp-up time for new hires.
- Developed a comprehensive threat model and security strategy for a critical compliance product launch, identifying key risks and implementing regulatory mitigations.
- Established automated monitoring and alerting for key compliance workflows, enhancing operational efficiency and incident response times.

#### Software Engineer – Amazon Matching Platform

August 2023 – May 2024, New York, NY

- Joined Amazon full-time after completing my Master's degree to work on enhancing the transaction processing logic for the world's largest online catalog.
- Enhanced transaction processing logic, improving the accuracy of seller contributions matching across over 300 million products in the Amazon catalog by optimizing the performance of large scale systems.
- Resolved and mitigated several large-scale outages, ensuring the availability of Amazon's matching infrastructure.
- Migrated a legacy Java MAWS application to native AWS, utilizing AWS CDK to manage and deploy infrastructure for a service that identifies a subset of over 300 million products for matching.

#### Software Engineer – AWS Data Center Automation

May 2022 – August 2022, Seattle, WA

- Accelerated part replacement response times at over 250 AWS data centers as a graduate intern on the AWS Data Center Automation team.
- Developed React/Redux UI tools for managing JSON data in part replacement policies, enabling access for 5,000+ technicians and supporting faster updates across all centers.
- Streamlined policy editing from 20 hours to seconds by connecting the UI to DynamoDB via a Java client with STS and IAM integration.

### Connectify

#### Software Engineer

August 2019 – June 2021, Philadelphia, PA

- Boosted user engagement by implementing new features like real-time livestream detection, server selection, and an in-app speed test in Speedify, an app with over 10 million downloads.
- Enhanced accessibility across the Angular frontend, improving text-to-speech compatibility for millions of visually impaired users.
- Increased revenue by 60% through in-app purchases by implementing A/B testing and improving UI/UX based on user analytics.
- Improved user retention by 20% with features such as enhanced VPN usage statistics and in-app achievements.
- Led the development and release of EdgeWise Connect, an Android VPN app with over 100,000 downloads, and built white-labeled apps for clients.

### Brandywine Global Investment Management

#### Full Stack Software Engineer Co-Op

April 2017 – April 2019, Philadelphia, PA

- Developed, tested, and deployed over 100 Perl and Python jobs and SQL code for a company-wide accounting engine upgrade.
  - Led the development of a React app, enabling traders to access detailed historical trade reconciliation data, replacing 20-year-old Access files.
  - Migrated legacy Perl scripts to Python to improve trade reconciliation processes across the firm.
  - Developed C# ASP.NET APIs to enhance data accessibility and retrieval from Access databases.
-

## EDUCATION

---

### Master of Science in Computer Engineering

New York University • New York, NY • 2023

### Bachelor of Science in Computer Information Systems

Minor in Operations Management • Drexel University • Philadelphia, PA • Jun 2019

---

## SKILLS

---

**Programming Languages:** Python, Java, JavaScript, TypeScript, C#, SQL

**Frameworks:** React, Redux, Angular, Node.js, CDK

**Tools & Technologies:** AWS, DynamoDB, IAM, STS, SQS, Lambdas, CDK, CI/CD, Docker

**Technical Expertise:** Infrastructure Scalability, Distributed Systems, Accessibility Enhancements, Full Stack Development

---

## PROJECTS

---

### Detect Mask Type

<https://www.detectmask.com> • January 2022 - January 2022

- Trained a model using Google TeachableMachine with 50 epochs, a batch size of 16 and 0.001 learning rate to determine mask type.
  - Created 3 different classes for possible images - No Mask, Cloth Mask, and Medical Mask, trained using 500 samples.
  - Hosted and deployed a React app using AWS Amplify and set up CI/CD that implemented this model.
-