

# AKSHAY KAPOOR

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## EDUCATION

**Drexel University, College of Computing and Informatics**

Masters in Computer Science

Philadelphia, PA

2021 - 2023

**Narsee Monjee Institute of Management Studies**

Bachelors in Information Technology

Mumbai, India

2017 - 2021

## WORK EXPERIENCE

### Dukaan

Philadelphia, PA

*Founding Engineer / Part-Time*

January 2023 - Present

- Developed mobile application with **React Native** and **Node**, offering push notifications, live tracking and faster checkouts
- Implemented services using **Stripe** for payments, **Drive** for deliveries and architecting custom backend for integration of new features, which streamlined operational efficiency by 40% and increased payment processing speed by 35%
- Utilized **Google Cloud** and **Firebase** for secure authentication and enhanced data management efficiency

### Infoway Software

Sayreville, NJ

*Software Engineering Intern*

September 2022 - March 2023

- Automated report generation using **MySQL** and **Python**, saving over 100 hours per month in manual labor
- Optimized UX with **React hooks** for real-time notifications, pagination, and filtering to achieve 30% boost in performance
- Mitigated build failures by 20% through Continuous Integration and used **Datadog** to track response times, error rates, resource usage
- Developed microservices using **RESTful APIs** with **Node.js** and **Express** for features such as product searches, orders, and payments

### TruckBux

Philadelphia, PA

*Software Engineering Intern*

January 2021 - June 2021

- Built a custom backend API with **Node.js** and **Express**, streamlining data management and database access for the team
- Implemented features such as a camera module and social media login using Test-Driven Development practices
- Developed automation solutions leveraging **Shell** and **Java** scripts to increase operational efficiency by 30%
- Managed and optimized **AWS** services like EC2, S3, and RDS, improving system scalability and security

## PROJECTS

### Disease Identification System Using Image Analysis / Team Leader and Developer

July 2020 - May 2021

- Led a team of 4 developers in building a Flask and JavaScript-based web app, utilizing a Neural Networks and OpenCV ML model for image-based ailment classification with 88% accuracy, and improved model performance by 10% through image augmentation techniques

### Natural Language Processing: Sentiment Analysis / Developer

September 2021 - October 2021

- Leveraged Python, NLTK, and sci-kit-learn to develop and train a sentiment analysis model on a dataset of 10,000+ tweets, achieving 85% accuracy, with performance metrics including 0.82 precision, 0.8 recall, and 0.81 F1-score

### Othello Game AI Development / Developer

January 2022 - February 2022

- Implemented an intelligent Othello agent using Minimax and Alpha-Beta algorithms, achieving consistent victories over random players and efficiently optimizing search times at different depths

## SKILLS

**Programming Languages:** Python, C, C#, C++, Java, JavaScript, HTML, CSS, TypeScript, .NET, SQL, PostgreSQL, MySQL

**Frameworks and Design:** Node.js, React.js, jQuery, Flask, Bootstrap, JSON, MATLAB, AJAX, Unity, Bash, OpenCV, AWS, GCP

## RESEARCH & PUBLICATIONS

- "Disease Identification System Using Image Analysis", Turkish Journal of Computer and Mathematics Education (SCOPUS Index), April 2021
- "Cyberwarfare", Journal of University of Shanghai for Science and Technology, November 2020
- "Structure of Financial Systems and their Effects on Economic Development", International Journal of Social Science & Economic Research, November 2020
- "Web application: Vulnerability Assessment and Penetration Testing", GIS Science Journal, November 2020