AKSHAY KAPOOR

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WORK EXPERIENCE

Dukaan   **Philadelphia, PA**
Founding Engineer / Part-Time   Jan 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   Sept 2022 - Mar 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   Jan 2021 - Jun 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

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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

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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

EDUCATION

Drexel University, College of Computing and Informatics   Philadelphia, PA
Masters in Computer Science   2021 - 2023
Narsee Monjee Institute of Management Studies   Mumbai, India
Bachelors in Information Technology   2017 - 2021

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