

J.B. SPEED SCHOOL OF ENGINEERING

EDUCATION

Jay Patel

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Bachelor of Science in Computer Science & Engineering

ucky **GPA 3.88/4.0**

J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky *In Progress*

Hours Completed: 140.75

Bachelor of Science in Aeronautical Engineering

January 2020 - July 2021 GPA 2.60/3.0

Universidad Tecnológica de Panamá, Panama City, Panama Not Completed

Hours Completed: 65

H.S. Diploma in Science and Arts with emphasis in Banking

March 2014 – December 2017

Escuela Panama – Panama School, Panama City, Panama

GPA 4.5/5.0

August 2025

SKILLS/COURSEWORK

- HTML, PHP, Javascript
- C, C++, Java, Python, Kotlin
- Mobile Development (iOS & Android)
- Software Development
- FPGA / Arduino
- Computer Hardware Maintenance
- Trilingual

- SQL
- Artificial intelligence
- Embedded System
- Programable Logic Design (PLC)
- HMI / SCADA
- Algorithm & Cryptography
- Microcomputer & Operating system Design

APPLIED EXPERIENCE

Course Projects:

Ignition Interlock System (Capstone Project): Developed a MoCA test app for individuals with dementia, designed to assess cognitive function. The app evaluates the test results and, if passed, unlocks the user's car to allow driving. Aimed to enhance safety and independence for people with dementia.

Minesweeper with AI: Developed a Minesweeper game in C# and integrated an AI solver for strategic mine detection, showcasing proficiency in game development and artificial intelligence.

Artificial Intelligence: Engineered a comprehensive TSP solution encompassing brute force, BFS, DFS, heuristic, genetic algorithms, and Wisdom of Crowd methodology, demonstrating a mastery of diverse AI techniques to efficiently address the intricacies of route optimization and contribute to the field of algorithmic decision-making.

Software Development: Designed and implemented Stock++, a comprehensive stock market tool enabling users to navigate and filter real-time stock data through a user-friendly interface, enhancing investment strategies by offering personalized analysis and trend identification.

Cornerstone Project: Project in which we had to work with creativity, 3D printing, programming, and circuitry. In this project we designed parts to be able to mount it to a sewage system. The pieces were connected to a circuit and Arduino which calculated the purity level of the treated water.

WORK EXPERIENCE

Diversified Automation Inc

January 2024 – July 2024

Software Co-op

Louisville, Kentucky

- Conducted system testing, commissioning, and QA testing for systems and panels, including associated computers and monitoring software.
- Developed and optimized software systems HMI, SCADA and PLC systems.
- Performed both office and field startup activities as assigned.

Alorica

March 2019 – June 2019

Call Center Agent

Panama City, Panama

- Utilize communication skills and empathy for customer service. Utilize different technical skills to give tech support for the different devices.
- Utilize analytical skills to solve varieties of billing problems, or application problems.

ACTIVITIES/HONORS

Volunteer in nursing homes raising funds and spending time with abandoned seniors.

EXTRA COURSES

PHP with MySQL Essential Training (LinkedIn).
Ignition 8.1 IU Credential (Inductive Automation)
Microsoft Office Specialist in Word / Excel / PowerPoint (Microsoft)

