BHAVIK PATEL

832-293-7191 | bpatel2001h@gmail.com | linkedin.com/in/bpatel2001 | github.com/bpatel2001 | U.S. Citizen

EDUCATION

University of Houston — August 2024
Bachelor of Science in Computer Science, Minor in Mathematics — *Houston, TX*

EXPERIENCE

Technical Systems Specialist — December 2023 – Present
Palace Inn — *Houston, TX*
- Resolved network issues, namely with Cisco routers and Ubiquiti firewalls, ensuring 99.9% uptime.
- Provided technical consulting to business partners, resolving 95% of hardware and software issues.
- Maintained a surveillance system with over 16 IP cameras and NVRs, enhancing security.

Software Engineering Intern — June 2021 – September 2021
Sycamore Life Sciences — *Houston, TX*
- Automated the analysis of pricing data for 250+ product listings using Python, reducing manual effort by 90%.
- Incorporated NumPy and matplotlib to visualize pricing trends, enabling insight for pricing strategy.
- Promoted sales by up to 50% for target products by implementing pricing trend analysis algorithms.
- Complied with API rate limitations by implementing timing delays, reducing manual intervention by 95%.
- Developed the company website using HTML and CSS within Magento, improving website visuals.

PROJECTS

Chip-8 Interpreter | *Python, Pygame, Git* — October 2024 – November 2024
- Built a Chip-8 virtual machine using Python, implementing 35 opcodes to execute and run classic programs.
- Integrated Pygame to emulate the original 16-key hexadecimal keypad, as well as managing graphics and sound.
- Optimized CPU timing using multithreading, ensuring 700-1000 IPS with 60 Hz delay timers.

Hotel Reservation System | *MongoDB, Express, React, Node.js, Git* — February 2024 – April 2024
- Created a full-stack hotel reservation website to check-in customers for small businesses, using CRUD operations.
- Established RESTful APIs with Express and Node.js for reservations, customer profiles, and notes.
- Utilized MongoDB to effectively store customer data and Mongoose for schema definition and validation.

Video Game | *C#, Unity, Git* — August 2023 – December 2023
- Conducted the core development of a stealth-action 2D game, *Back To Life* in Unity, alongside a team of 7.
- Implemented dynamic lighting using URP, AI pathfinding, and interactable objects using C# and Unity tools.
- Presented to a panel of 10 industry professionals, demonstrating gameplay and background into development.

Gas Price Website | *MongoDB, Express, JavaScript, Node.js, Git* — January 2023 – May 2023
- Collaborated with a team of 4 to build a full-stack gas price estimation website within an Agile environment.
- Deployed a tech stack using Node.js and Express to manage user authentication, complete with unit tests.
- Designed a sleek front-end with JavaScript, HTML and CSS to deliver a seamless user experience.

Near-Earth Asteroid Identification | *R, ggplot2, Posit Cloud* — January 2023 – May 2023
- Applied machine learning algorithms to classify near-earth asteroids as potentially hazardous using R.
- Analyzed a 40-feature dataset with 4,687 records, identifying the best-performing algorithm for the purpose.
- Visualized results and correlations with ggplot2, presenting our findings in a in-depth research paper.

TECHNICAL SKILLS

Languages: Python, C#, C++, Java, JavaScript, SQL, R, HTML, CSS
Frameworks/Libraries: Node.js, Express.js, React, OpenCV, NumPy, Selenium, BeautifulSoup
Developer Tools: Git, Linux, MongoDB, Magento, Vite, Posit, Docker
Relevant Courses: Data Structures/Algorithms, Database Systems, Software Design, Computer Architecture