

Dixit B. Patel

Software Engineer/Developer | Ph.D.

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SUMMARY

Experienced Software Engineer with a robust background in software engineering, development, and research. Proven expertise in crafting and optimizing code for peak efficiency, performance, security, and scalability. Recognized for leading and driving innovation through research-driven tech projects, consistently delivering exceptional results. Demonstrates strong leadership and collaborative skills, guiding teams to achieve strategic objectives and enhance customer outcomes. Adept at leveraging research to inform development practices and solutions, while fostering a culture of excellence and commitment. Eager to adapt and excel in dynamic, collaborative environments to deliver high-quality tech solutions and inspire teams toward success.

TECHNICAL SKILLS

Languages: Python, C#, Java, SQL, HTML, CSS, JavaScript

Databases: MySQL, PostgreSQL

Version Control/Collaboration: Git, GitHub

Framework/Cloud: Django, AWS

IDEs: VS Code, PyCharm, Spyder, Visual Studio, Android Studio

Tools and Technology: JSON, Unit Tests, Jupyter Notebook, Anaconda, Python Libraries (NumPy, Pandas, Matplotlib, etc.), Agile, SDLC, Mobile/Web Development

Operating Systems/CLI: Windows, Linux, MacOS

Additional Skills: Back-end Development, Front-end Development, Object-Oriented Design and Analysis, Application Development, Data Structures and Algorithms, Algorithm Design and Analysis, Cloud Computing, Artificial Intelligence, Database Management Systems, and Data Analysis/Analytics

EXPERIENCE

Fabricators – Software Engineer, *Chattanooga, TN, USA*

April 2023 – Present

- Engineered strategic code enhancements, introducing advanced data structures and algorithms that boosted execution efficiency by 33%.
- Orchestrated the optimization of manufacturing operations through innovative Python-based solutions, enhancing productivity and operational efficiency.
- Employed proficiency in Python, JSON, MySQL, Git, and back-end development, pivotal in advancing team capabilities and technological innovation.
- Ensured adherence to rigorous quality standards throughout the software development lifecycle, conducting comprehensive peer code reviews.
- Leveraged Linux-CLI for streamlined system administration and managed code repositories using GitHub, ensuring seamless integration and collaboration across cross-functional teams.
- Contributed to technical guidance to team members, fostering a collaborative and high-performance work environment.

Wright State University – Graduate Research Assistant, *Dayton, OH, USA*

Dec 2018 – Dec 2022

- Led research and development of mobile healthcare applications, leveraging Python and C# to advance care delivery and health equity.
- Delivered products that exceeded client expectations, contributing to securing a \$1M grant for the next phase of the project.
- Designed and implemented comprehensive unit test cases, ensuring rigorous testing and validation of software functionalities to deliver robust and reliable applications.

- Employed expertise with Python, C#, GitHub, Back-End Development, and Database Management Systems (DBMS), including MySQL, contributing to the technological prowess of the team.
- Managed team meetings and client calls, ensuring alignment with project objectives and exceeding client satisfaction with delivered products.
- Utilized efficient Data Structures and Algorithms to deliver innovative software solutions, significantly reducing downtime and increasing application output, demonstrating a skillful approach to software development for optimal performance.

L&T Technology Services – Software Engineer, Navi Mumbai, MH, India

June 2016 – June 2018

- Contributed to the design, development, and delivery of customized software solutions tailored to specific client needs, utilizing a dynamic Python tech stack.
- Played a key role in developing features for client software solutions, ensuring alignment with project goals and enhancing overall product functionality.
- Contributed to the design and development of an AI model-based proof-of-concept (POC) for product quality control and leveraging advanced Python libraries to enhance data analysis and analytical tasks for efficient processing.
- Developed, tested, and validated the computer vision-based AI model, significantly enhancing overall product quality and defect detection accuracy.
- Played a key role in developing features for client software solutions, ensuring alignment with project goals and enhancing overall product functionality.

EDUCATION

Doctor of Philosophy (Ph.D.) | Wright State University | 2019 - 2022

Computer Science and Engineering | GPA: 3.92/4.0

Master of Science (M.S.) | Wright State University | 2018 - 2022

Computer Science | GPA: 3.92/4.0

Bachelor of Engineering (B.S.) | Gujarat Technological University | 2011 - 2015

Electronics and Communication Engineering | GPA: 3.52/4.0

Achievements

- Honored and awarded for outstanding project completion during the tenure at L&T Technology Services.
- Honored with fellowship for outstanding research contributions at Wright State University.
- Honored and awarded for outstanding research publication during the tenure at Wright State University.

Peer-reviewed Research Publications

- Please refer to the publications listed on my [Google Scholar Profile](#).
- Please refer to the publications listed on my [ResearchGate Profile](#).

Recommendations

- Please refer to the Recommendations section on my [LinkedIn Profile](#).

Professional Values and Ethics

- **Commitment:** Persistently work towards achieving project goals.
- **Collaboration:** Promote teamwork to achieve the best results.
- **Integrity:** Uphold honesty and ethical standards in all actions.
- **Innovation:** Embrace new technologies and methods for continuous improvement.
- **Customer Focus:** Prioritize customer needs and satisfaction.
- **Adaptability:** Stay flexible and resilient amid changing priorities.
- **Ownership:** Ensure reliability by taking full responsibility for tasks and outcomes.
- **Empathy:** Foster team understanding through empathetic communication.