

TIRTH SHAH

SOFTWARE DEVELOPER - Full Stack Development, RESTful APIs & Test Automation

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 [Toronto](#)

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SKILLS

- **Programming Languages:** Python, Java, SQL, JavaScript, TypeScript, Node.js, MongoDB, Bash, JSON
- **Web Development:** HTML5, CSS3, Bootstrap, React.js, MERN Stack, Responsive Design Compatibility
- **Backend & API Development:** RESTful APIs, Express.js, API Integration, Authentication & Authorization
- **Tools & Platforms:** Git, GitHub, JIRA, Docker, Postman, VS Code, Linux, NPM, Agile/Scrum, JWT/OAuth
- **Testing & QA:** Bug Tracking, Test Driven Development (TDD), Unit and Manual Testing, Integration Testing
- **DevOps & Architecture:** CI/CD Pipelines, GitHub Actions, Version Control, System Design Principles

WORK EXPERIENCE

Software Developer (Capstone Project)

Cyglera

May 2024 – August 2024

Toronto

- Engineered a full-stack MEAN application, streamlined workflow processes for internal users, optimizing data flow and reducing manual processing time by 30%, supporting scalable interactions across 1,000+ user requests.
- Integrated Stripe based payment processing with secure tokenization and real-time validation, reducing average checkout latency rates by 40% and improving transaction success rates across multi-device user scenarios.
- Designed modular Angular UI components and structured Node.js backend endpoints, enabling a 25% increase in user interaction efficiency and achieving 98% code reliability through unit and integration testing cycles.

Quality Assurance Analyst

Saras 3D

April 2022 – November 2022

India

- Developed and executed 50+ structured test cases across core modules, expanding test coverage by 35% and contributing to the early detection of defects prior to production deployment across three major release cycles.
- Conducted functional, regression, and integration testing, reducing high priority production defects by 40%, logging and tracking 100+ issues in JIRA to maintain a 95% sprint completion rate with engineering teams.
- Collaborated with development staff to strengthen SDLC alignment, refining QA workflows and decreasing testing cycle time by 20%, resulting in consistent release quality and faster turnaround for customer builds.

Python Developer Intern

Infolabz

January 2022 – March 2022

India

- Designed Django based backend logic and REST APIs, improving endpoint response times by 20% and supporting seamless integration with frontend components, enabling consistent performance across application modules.
- Assessed unit test suites, increased automated test coverage to 85%, reducing post-deployment defects and contributing to more stable release pipelines within Agile sprints spanning three major development cycles.
- Collaborated with a 4 member engineering team to debug, refine, and deploy features through a CI/CD pipeline, ensuring 92% smooth cross-team integration and enhancing overall sprint efficiency through issue resolution.

PROJECTS

YOLO Based Object Detection for Humber College Branding

Individual Project

- Developed a YOLOv8 based computer vision model to detect Humber College logos and branded text across diverse image conditions, training on a custom dataset of 1,000+ labeled samples and achieving 92% accuracy.
- Engineered an optimized preprocessing pipeline using OpenCV covering noise reduction, contour refinement, and bounding box rendering, improved real-time detection stability by 28% across three sourced image datasets.
- Conducted iterative testing, hyperparameter optimization, and dataset evaluation to enhance model, reducing false detections by 17% and boosting precision by 15%, enabling reliable deployment for branding verifications.

EDUCATION

Ontario Post Graduate Certificate – Information Technology Solutions

Humber Polytechnic (IGS Campus), Toronto, ON

January 2023 – August 2024

Bachelor of Engineering - Information Technology

Gujarat Technological University, Gujarat, India

July 2018 – May 2022