

YUVRAJ KOROTANA

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Skills

Frontend: HTML5, CSS/SCSS, Bootstrap, JavaScript, TypeScript, Reactjs, EJS, Client Side Testing, Selenium Web driver
Backend: Python, Django, Java, Nodejs, MongoDB, MySQL, SQL, Unit Tests, Integration Tests
Tools & Platforms: Git, Postman, Firebase, Google Cloud, Docker, JIRA, Confluence, AWS, PyCharm

Education

University of Saskatchewan

Bachelor's of Science (Computer Science)

Apr 2020 – Apr 2025

Saskatoon, SK

Work Experience

Full Stack Developer Associate

Saskatchewan Blue Cross

Aug 2023 – Aug 2024

Saskatoon, SK

- Developed python-based data pipelines and automation scripts to support insurance workflows (data sync, reporting, email delivery, document generation: CSV/PDF).
- Automated a high-value data process, replacing IBM AS/400 dependencies and manual employee tasks with a scalable workflow (binary file parsing + Kadane's algorithm), delivering **\$30K+ annual** savings.
- Collaborated with cross-functional teams from Manitoba Blue Cross and SGEU; Participated in Sprint Planning, Code Reviews, and Retrospectives.
- Built and executed automation tests, unit tests, and integration tests to ensure data quality and reliability. Maintained comprehensive technical documentation using UML and Confluence.

Application Developer

Canadian Light Source

May 2022 – Aug 2022

Saskatoon, SK

- Designed and built interactive dashboards using Django and Jinja for real-time data analytics, featuring dynamic graphs and statistical insights.
- Authored RESTful APIs and optimized a key matching algorithm from **$O(n^2)$ to $O(n)$** using tokenization, set logic, and ORM prefetching, improving system scalability and response time.
- Contributed to GitLab CI/CD pipelines and conducted code reviews in a cross-functional Agile team of researchers and analysts.
- Delivered end-to-end Full-Stack CRUD features with secure data handling, aligned with user workflows and research compliance needs.

Support Analyst – IT Services

University of Saskatchewan

May 2021 – Apr 2023

Saskatoon, SK

- Resolved **1500+ technical issues** using ITSM(service now, JIRA) tools.
- Delivered Tier 1 and Tier 2 technical support to multiple students, faculty, and departments, resolving incidents related to Windows, macOS, MS Office 365, MFA, Printing, and networking tools through an ITSM ticketing platform.

Teaching Assistant (Python, Git, Mathematics (Calculus))

University of Saskatchewan

Jan 2021 – Dec 2022

Saskatoon, SK

- Guided students through labs, provided academic support, evaluated 200+ assignments with feedback.
- Helped students with conceptual understanding and problem-solving, refined teaching and planning skills.

Projects

Target Practice Graphical Editor & Drawing Board App | Java, MVC, OOP

[Source Code](#)

- Developed Java based graphical editor using MVC & OOP for 2D targeting & state-machine diagram creation.
- Integrated command pattern for undo/redo, custom clipboard for cut/copy/paste, and multi-selection editing.
- Implemented mode-switching state machines and real-time Fitts' Law tracking with dynamic **ScatterCharts**; enabled synchronized view updates using publish-subscribe and view panning.

E-Commerce Web App | MongoDB, Expressjs, Reactjs, Nodejs

[Source Code](#)

- Built a full-featured e-commerce app with inventory management, product catalog, shopping cart, order tracking, and role-based user authentication.
- Secured the app using bcryptjs for password hashing, csrf for CSRF protection, and express-session for session handling. Integrated Multer for secure image uploads

Certifications

- [HackerRank \(Reactjs, Nodejs, REST API, SQL, Data Structures and Algorithms\), Prompt-Engineering](#)
- [Python & Django Full Stack Development, Full Stack Development\(React, Node, Express, MongoDB\)](#)
- [AWS Data Associate, Testing and Debugging,](#)