

# Gursahib Singh

<https://codesahib.github.io/gursahibsingh/>

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## EDUCATION

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- **University of Waterloo** Waterloo, ON  
*Master of Engineering in Electrical and Computer Engineering* *Sept. 2021 – Dec. 2022*
- **Thapar Institute of Engineering and Technology** Patiala, India  
*Bachelor of Engineering in Computer Engineering; CGPA: 9.50/10* *July 2015 – June 2019*

## EXPERIENCE

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- **Bluekey AI** Toronto, ON  
*Full Stack Developer Intern* *June 2022 - Present*
  - **University Corpus:** The project involved collecting admission related data and requirements of North American universities and serve the data dynamically based on student requirement. The data was managed using MySQL and AWS. A standardized parser was developed to parse the CSV data into JSON thus saving crucial time to include data for any new university.
  - **Mock Tests:** Developed the platform to host mock tests for students. The questions for the mock tests are selected randomly according to a ranking algorithm to have a set of questions based upon appropriate difficulty and priority of each topic.
  - **External API integration:** Carried out the integration of an online book store API to facilitate the sales of E-books from Bluekey AI platform.
  - **Student Assessment and Resource system:** Developed a platform to access student performance based upon current courses and grades and thus recommend useful resources such as free notes, e-books, tutoring for student's success.
- **UbiLab, University of Waterloo** Waterloo, ON  
*Full Stack Developer Intern* *July 2022 - Present*
  - **Data collection platform:** Managed the front-end, back-end and database of the data collection platform.
  - **Devices APIs:** Worked on APIs and platform developemnt for devices such as Ecobee and Fitbit.
- **Siemens EDA** Noida, India  
*Senior Member Technical Staff* *Aug. 2019 - Sept. 2021*
  - **Test case repository:** Developed a phone directory type tool for a test case repository of 100,000 test cases to efficiently find any required test case thus saving time of the development team.
  - **Automated bug finder platform:** Developed a tool to automatically find the commit/changes that lead to test case failures using Python, Perl and Shell. The project was built by extensively using OOPs concepts and external API integration.
  - **Dashboard:** Developed new features in the Infrastructure Dashboard that helped R&D to have a better view over product regression and release related data. It involved extracting data from various log files and then processing it using Python and JSON. The information was displayed with the help of Flask, JavaScript, HTML and CSS.
  - **Product build/regression/release:** Managed and coordinated the product development cycle from build to regression and finally to product release.

## PROJECTS

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- **Optimal Cryptocurrency Portfolio Selection Using Genetic Algorithm — [GitHub](#), [Demo](#):**
  - To find the optimal crypto portfolio given various assets using Genetic Algorithm techniques such as Natural Selection, Crossover and Mutation.
- **ShareMyGaddi - Carpool web application(Full stack) — [GitHub](#):**
  - To develop a full-stack carpooling web application using React.js, Node.js, MongoDB and including end-to-end testing using Jest and Cypress.io.
- **Personal Website — [Link](#), [GitHub](#):**
  - The website acts as a digital resume and displays information about my projects and blogs.

## PROGRAMMING SKILLS

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- **Languages:** C++, Python, JavaScript **Technologies:** React.js, Node.js, Django, AWS **Libraries:** Pandas, Numpy, Matplotlib, Seaborn, Scikit-learn, Keras