## HARSH TANK

Education

Concordia University

September 2023 – May 2025

Master of Applied Computer Science

Montreal, Canada

LDRP Institute of Technology and Research

August 2018 – May 2022

Bachelor of Engineering in Computer Engineering

Gandhinagar, India

Relevant Coursework

• Data Structures

• Algorithm Design

• Artificial Intelligence

• Distributed Systems

Experience

Datacurve
Contract Software Engineer

April 2024 – Present

• Provided precise and highly curated training data for **LLMs** to build better **generative** developer tools.

 Developed SQL schemas and relations, troubleshooted React and Tailwind UI issues, and provided solutions for data-driven ML models.

TatvaSoft July 2022 – July 2023

 $Software\ Engineer$ 

Ahmedabad, India

Remote, Canada

• Integrated 3rd party payment gateway APIs like Shopify, Stripe, Lightspeed, Clover, and Square.

- Optimized resource-intensive code and join queries through **Sequelize ORM** reducing API response time by **30%**.
- $\bullet \ \ \text{Automated Firebase push notifications for $3000$ users, delivering $10,\!000$ messages daily, implemented using webhooks.}$
- Reduced 50% of build time by automating app development and testing stages using **Docker** and **CI/CD** pipeline.

TatvaSoft January 2022 – June 2022

Software Engineer Intern

Ahmedabad, India

- Build Node is **cronjob** to automate database backups and subscription reminders, slashing manual efforts by **66%**.
- Enhanced data security on Google Cloud Platform by updating bucket access rights with precise IAM policies.
- Collaborated with team members using **Git** and **Bitbucket**, to facilitate code organization and task delegation.
- Improved developer experience by visually documenting RESTful APIs with SwaggerUI, enhancing UI interaction.

**Projects** 

Satellite Image Classification | Pytorch, OpenCV, Sklearn, Seaborn (Github Link)

April 2024

- Built a high-precision satellite image classifier achieving 98.6% accuracy using 65,000 images across 60 classes.
- Implemented transfer learning with **ResNet18**, **MobileNetV2**, and **VGG16** architectures, utilizing ADAM, RMSProp, and SGD optimizers to minimize loss function with adaptive learning rate.
- Visualized CNN model performance and data exploration through **TSNE** and confusion matrices while tuning hyperparameters.

HelperLand | React.js, Node.js, PostgreSQL, TypeScript (Github Link)

January 2022

- Developed full-stack household cleaning service web app, to map service providers to customers using area postal code.
- Implemented email notification service using **Nodemailer** and added Two-factor authentication for user registration and OAuth login by sending **OTP**.
- Utilized SonarQube to eliminate CodeSmells, resulting in a reduction of 4% of redundant source lines of code.

## Technical Skills

Languages: C++, Java, Python, JavaScript, TypeScript, SQL, HTML, CSS

Frameworks: GraphQL, Next.js, React.js, Angular, Node.js, Express.js, Socket.IO, Flask, Tailwind, Bootstrap, jQuery Tools and Technologies: Docker, Kubernetes, PostgreSQL, MongoDB, SonarQube, Git, GitHub Actions, Jira/Scrum, Postman, JUnit, Maven

## Leadership / Achievements

- Led the team in the Student Startup and Innovation Policy Hackathon.
- Recognized as an **ACM-ICPC Regionalist** 2020-21, the most prestigious programming competition globally.
- $\bullet$  CodeForces: Specialist Badge with max rating 1456. Ranked in the top 7% of user profiles. (Profile Link)
- Secured global rank 1478 out of 32000+ participants in Codeforces Round 929.