

# Yashesh Dasari

(548) 333-4442 | ydasari@uwaterloo.ca | [www.linkedin.com/in/yasheshdasari](http://www.linkedin.com/in/yasheshdasari) | [Website](#) | Waterloo, ON

## SUMMARY OF QUALIFICATIONS

---

- Lead design and optimization of convolutional neural network (CNN) for screening brain disorders using MRI images
- 1 year experience in developing Artificial Intelligence-based tools to support medical industry
- 1+ year experience in Software Development and Machine Learning Engineering implementing Object Oriented Design principles; ability to develop high-quality, robust, re-usable, and scalable codes within deadlines
- Strong background in Data Structures and Algorithms, Software Engineering practices, SDLC, Testing
- Self-motivated developer with a drive for complex problem solving, continuous improvement, and learning new tools
- Excellent communication and interpersonal skills and ability to collaborate and articulate ideas to diverse audiences in both verbal and written means (in English)

## SKILLS

---

<b>Programming Languages</b>	C, C#, Python, HTML, CSS; <i>OS-</i> Windows/Linux; <i>Others:</i> Git, Bitbucket, Agile, Poetry
<b>Machine Learning</b>	Regression, Clustering, Time-series forecasting, Classification, Predictive modelling
<b>Data Analysis</b>	Data management, Visualizations, Interpolation; <i>Tools:</i> MATLAB
<b>Frameworks &amp; Libraries</b>	TensorFlow, Keras, Scikit Learn, PyTorch, NumPy, SciPy, Pandas, Matplotlib

## RELEVANT EXPERIENCE

---

**Thornhill Medical, Toronto ON** | Graduate Research Assistant- Machine Learning **Jan - Dec 2022**

- Designed a customized CNN to screen steno-occlusive disease (SOD) patients by classifying MRI images with train/validation accuracy of 99%/100%, supporting clinicians at participating institutions make data-driven decisions
- Conducted empirical studies to optimize the network architecture and fine-tune the network hyperparameters

**Thornhill Medical, Toronto ON** | Graduate Research Assistant- Software Development **Jan - Dec 2021**

- Analyzed user requirements to engineer an in-house software on Linux environment to process biomedical images using **Python**, **Git**, and **Poetry**, automating clinical workflow by **75%**, & transitioning to open-source tools
- Designed unit test suites to test software modules functionality and ensure high code coverage
- Collaborated with senior developers for efficiency optimization, debugging, and bug verification

**Ansys Canada Ltd., Waterloo ON** | CAE Software Development Support Co-op **May - Aug 2020**

- Developed Python modules to analyze simulation data and visualize trends for advancing scalability projects
- Furthered **regression testing** by developing automated test scripts using C# for back compatibility, integration, and functional tests for the in-house testing suite

## EDUCATION

---

**Master of Applied Science in Mechanical and Mechatronics Engineering** **Sep 2019 - Dec 2022 [Expected]**

University of Waterloo, Waterloo ON. GPA: 82

- *Extra-curricular:* Developed strategies to realize organizational goals as the Deputy Board Chair of Graduate Student Association & Sponsorship Representative of the UNICEF at University of Waterloo.

**Bachelor of Technology in Mechanical Engineering** **2015 - 2019**

Vellore Institute of Technology (VIT), Vellore, India. GPA: 90.3

## HIGHLIGHTS & AWARDS

---

- Awarded the *University of Waterloo Graduate scholarship* and the *Faculty of Engineering Graduate scholarship* for my pioneering software project and the ongoing novel research at Thornhill Medical
- University of Waterloo highlight: Realized [cost benefit of \\$500,000 per year](#) during my capstone design project
- Achieved [2nd place among 500+ participants](#) for designing vaccination device, accelerating vaccination rate by 25%