Languages and Tools:

* C
* C++
* JAVA
* Python
* Octave
* MATLAB
* MySQL
* HTML, CSS and JavaScript
* Linux shell script

Fields of Interest:

* Machine Learning
* Deep Learning and Neural Networks
* Data Structures
* Algorithms
* Operating Systems
* Database Management Systems

Projects:

Using Deep Learning and Convolutional Neural Networks to create a novel vehicle tracking system.

Modeling student behavior using Machine Learning, to improve automated instructional decisions made by intelligent tutoring systems, for teaching histograms to students.

Implementing the game, ‘Tic Tac Toe’ using Game Trees and the Minimax Algorithm

Implementing the game, ‘Hangman’ in Java using database connectivity with MySQL

Study of the network routing problem, and minimum-hop and minimum interference routing heuristics through implementation

Creating and implementing a Social Networking database on MySQL

Studying the ionosphere using GPS technology at SIT (in association with ISRO).

\* All projects are listed with documentation at: <https://github.com/Uppaal/Projects.git>

Research Papers and Conferences:

* Presented a research paper on “Exploring Robust Vehicle Detection and Tracking Methods for Various Illumination Settings using Infrared Thermographic Images” at the NCPCI Conference at VIIT, Pune on March 19th, 2016 (Published in the International Journal of Research in Advent Technology).
* Presented a research paper on “Exploring the Facets of Colonization of the Red Planet – Mars” at the Student Conference on Emerging Technologies and Innovations at SIT, Pune on August 19th, 2014.

Achievements:

* All India Rank 2 in National Creativity and Aptitude Test (NCAT), 2015

All India Rank 15 in National Creativity and Aptitude Test (NCAT), 2014

All India semi-finalist at IT Olympiad, 2016 (organized by Computer Society of India.)

All India semi-finalist at Code Uncode, 2014

Topped the course on Space and Quality Environment (in association with ISRO)

Topped at school-level in International Mathematics Olympiad, 2010

Topped at school-level in International Science Olympiad

Second at school-level in National Cyber Olympiad

Participated in the OurCS 2015 research workshop at Carnegie Mellon University, USA, dealing with machine learning.

Selected for a semester exchange programme at National Technological University, Singapore

Participant in the RIPE Atlas Hackathon, 2016, at Copenhagen, Denmark

Participating as a mentor in the Google Summer of Code, 2016.

Studying the ionosphere using GPS technology at SIT (in association with ISRO).

Work Experience:

Research in the field of Deep Learning at **Indian Institute of Technology**, Madras, funded by Microsoft Research, India.

Working as a freelance graphic designer for **Krea**, a corporate training consultancy company for their branding and training modules. Have also created the logo for the company.

Software development with **Think Tank**, a start-up focused on launching start-up ideas by harnessing technology.

Head of Design team for annual college festival, “Reverb”. Handled and managed entire branding, certifications and web and print designs.

Courses Taken:

|  |  |
| --- | --- |
| **MOOCs& Workshops** | **Institution** |
| Analysis and Design of Algorithms | Stanford University |
| Networks Illustrated | Princeton University |
| Algorithms Part I | Princeton University |
| Cyber Security Workshop | Infi-Zeal Technologies |
| Ethical Hacking | infySEC |
| Multimedia and Animation | Sumeru Academy of Digital Arts |
| Machine Learning | Andrew Ng, Stanford University |
| Communique (International Telecom Seminar) | Symbiosis Institute of Telecom Management |
|  |  |
|  |  |
|  |  |
|  |  |
| Learning How to Learn | University of California, San Diego |
|  |  |
| Machine Learning | Balaraman Ravindran, Indian Institute of Technology Madras (Postgrad course) |
| Reinforcement Learning | Balaraman Ravindran, Indian Institute of Technology (Postgrad course) |
| Microsoft Azure Workshop | Microsoft Research |

|  |  |  |
| --- | --- | --- |
| **EDUCATION AND TRAINING Institution** | **Course** | **Score/ GPA** |
| The Bishops Co Ed School | High School – ICSE (Class X) | 93% |
| Vikhe Patil Memorial School | Higher Secondary – CBSE (Class XII) | 85% |
| Symbiosis Institute of Technology | B Tech, Computer Science | 3.5 (out of 4) |