

SHASHANK KUMAR

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MyPortfolio · Linkedin · Github · ResearchGate · GoogleScholar

EDUCATION

B.M.S College of Engineering, Bangalore

Bachelor of Engineering in **Computer Science & Engineering**

Affiliated to Visvesvaraya Technological University (VTU)

August 2018-Present

GPA 8/10

SKILLS

Programming Languages: Python, C , C++ , Java , JavaScript , MATLAB

Hardware: System Verilog, Embedded C , Assembly , LTspice

Technologies/Frameworks: ROS, OpenCV , Android Studio , scikit-learn , Tensorflow , PyTorch

Databases: MySQL , Oracle Database , MongoDB

Operating Systems: Android , Linux , iOS

PUBLICATIONS / CONFERENCE

[C1] Shashank Kumar, Jeevithashree DV, Pradipta Biswas, “Website evaluation using WCAG tools and its imitation using Cambridge simulator.”, (**Frontiers**) 18th International Web for All Conference (W4A 2021), In: Ljubljana, Slovenia. [\[LINK\]](#)

[J2] Shashank Kumar, Shreyash Adhikari, Antara Roy Chaudhury, “An Empirical Study on Algorithms – Comparison Based Sorting Techniques.”, International Journal of Information Technology (**Springer**) (2020) [\[LINK\]](#)

[J1] Shashank Kumar, “A mechanism to overcome the toppling problem of a hexapod.”, International Journal of Intelligent Robotics & Applications (**Springer**) (2020) [\[LINK\]](#)

RESEARCH EXPERIENCE

Indian Institute of Science (IISc), Bangalore

July 2020 - Present

Guide: Dr. Pradipta Biswas, Assistant Professor, Centre for Product Design & Manufacturing (CPDM)

- Evaluated websites using the W3C tools to determine if web content meets accessibility guidelines.
- Imitated websites using the Cambridge simulator and prepared a paper on the same.

Nokia Research & Development Centre, Bangalore

March 2020 - Present

Guide: Mr. Rajat Duggal, Senior R & D Engineer

- Proposed a low-cost based multi terrain adaptive array antenna design.
- Implemented a genetic algorithm on the smart array antenna to improve its efficiency and improved the design of the existing antenna.

B.M.S College of Engineering, Bangalore

January 2020 - March 2020

Guide: Prof. Antara Roy Chaudhary, Assistant Professor, Department of Computer Science & Engineering

- Performed a review of all the sorting algorithms available and compared the performance of each with exiting methods.

Defence Research & Development Organisation (DRDO), Bangalore

July 2019 - August 2019

Guide: Dr. Nitin Dhiman, Scientist 'C', Centre for Artificial Intelligence & Robotics (CAIR)

- Integrated 3 sensors on a scout robot using C++, ROS and Gazebo.
- Devised a mechanism to overcome the toppling problem of a Hexapod and got it published as my first publication.

SELF-UNDERTAKEN PROJECTS

Autonomous path traversal robot: [\[Link\]](#)

OpenCV & Python

- Path detection , navigation , motor control, shape and Colour detection on Raspberry Pi3.

Loan predictor: [\[Link\]](#)

Python & Logistic regression

- Predicts who gets loan and who doesn't based on various financial factors.

Wikipedia Search Engine: [\[Link\]](#)

HTML, CSS & Javascript

- A search engine that pulls data from Wikipedia. And if you don't have anything in your mind to search for, you can press the Random Article button.

Face recognition & security: [\[Link\]](#)

OpenCV & Python

- Protect the Computer against strangers. If scammers want to log in to the computer, ring the phone and lock the computer screen automatically.

Weather App [\[Link\]](#)

HTML, CSS & Javascript.

- Created an API to display real time weather data from a darksky website.

RELEVANT COURSEWORK

AlgorithmsData Structures

Linear Algebra

Operating SystemsComputer Architecture

Discrete Maths & Statistics

Database Management SystemsMicroprocessors & Micro controllers

Theoretical Computations

EXTRACURRICULAR ACTIVITIES

Volunteering & Organisational Experience:

- Organised a Hackathon event organised by Protocol tech team at college & Rotact's Youth parliament.
- Awarded an 'A' Certificate in the National Cadets Corps training & supervised an obstacle training course for new recruits.
- Visited an old age home as a student member of the Rotaract club & participated in Green commute & Plog run to promote environmental activism.

Sports Activities:

- Won a Silver medal in the Regional level Boxing tournament held in Chennai & represented BMS College of Engineering at Intercollegiate sports tournament in Boxing.