Shashank Kumar

Portfolio: shashank.com
Github: github.com/shashank195
ResearchGate: researchgate.net/Shashank_Kumar11

Email: shashank.cs18@bmsce.ac.in
Mobile: +91-984-0312-458
Linkedin: linkedin.com/shashank195
ORCID: orcid.org/0000-0002-3170-329X

EDUCATION

- **B.M.S College of Engineering** — Bangalore, India
  Bachelor of Engineering - Computer Science & Engineering; GPA: 8/10 — *July 2018 - Present*
  Courses: *Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases*

PUBLICATIONS/CONFERENCE

JOURNAL ARTICLES

- **J3**: Jeevithashree DV, **Shashank Kumar**, Pradipta Biswas,"Website evaluation using WCAG tools and its imitation using Cambridge simulator.", International Journal of Human-Computer Interaction - ***Taylor&Francis*** (2020). *Link to paper*
- **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 to abstract*
- **J1**: **Shashank Kumar**,"A mechanism to overcome the toppling problem of a hexapod.", International Journal of Intelligent Robotics & Applications - ***Springer*** (2020). *Link to abstract*

SELECTED CONFERENCES

- **C1**: **Shashank Kumar**, Jeevithashree DV, Pradipta Biswas,"Accessibility evaluation of websites using WCAG tools and Cambridge Simulator.", 18th International Web for All Conference (**W4A 2021**), In: Ljubljana, Slovenia. *Link to paper*

RESEARCH EXPERIENCE

- **Indian Institute of Science (IISc), Bangalore** — July 2020 - Ongoing
  Guide: Dr.Pradipta Biswas, Assistant Professor, Centre for Product Design & Manufacturing — *Link to certificate*
  - : Evaluated websites using W3C tools, imitated them using the Cambridge Simulator to determine if web content meets the accessibility guidelines & proposed a concept of a common user profile format.
- **Nokia Research & Development Centre, Bangalore** — April 2020 - September 2020
  Guide: Mr.Rajat Duggal, Senior R & D Engineer — *Link to the presentation*
  - : Proposed a low-cost based multi terrain adaptive array antenna design.
  - : Implemented a genetic algorithm on the smart array antenna to improve its efficiency using MATLAB/Octave.
  - : Improved the design of the existing antenna by using a tilted conical shaped antenna.
- **B.M.S College of Engineering, Bangalore** — January 2020 - March 2020
  Guide: Prof.Antara Roy Chaudhary, Assistant Professor, Computer Science Department — *Link to the paper*
  - : Performed a review of all the sorting algorithms available.
  - : Compared the performance of each algorithm with exiting methods.
- **Defence Research & Development Organisation (DRDO), Bangalore** — July 2019 - August 2019
  Guide: Dr. Nitin Dhiman, Scientist 'C', Centre for Articial Intelligence & Robotics (CAIR) — *Link to the paper*
  - : Devised a mechanism to overcome the toppling problem of a Hexapod.
  - : Integrated 3 sensors on a scout robot using C++, ROS and Gazebo.

SELF-UNDERTAKEN PROJECTS

- **OpenCV & Python** *[Autonomous path traversal robot]* : Path detection , navigation , motor control, shape and colour detection on Raspberry Pi3. *[Face recognition & security]* : Protect the computer against strangers. If scammers want to log in to the computer, ring the phone and lock the computer screen automatically.
- **HTML, CSS & Javascript** *[Wikipedia Search Engine]* : 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. *[Weather App]* : Created an app using API to display real time weather data from a dark-sky website.
- **Python & Logistic regression** *[Loan predictor]* : Predicts who gets loan and who doesn't based on various financial factors.

SKILLS SUMMARY

- **Languages**: Python, C, C++, SQL
- **Web. & Mob. Technologies**: HTML5, CSS3, Dart, Javascript, MySQL, Bootstrap3, Flutter
- **AI Frameworks/Bi. Tools**: ROS, Gazebo Simul., OpenCV, Tableau, PowerBi, Matplotlib

EXTRACURRICULAR ACTIVITIES

Organizational/Teaching Experience:

- : Mentored a Blockchain Basics course on coursera.org for 2+ years & cleared doubts of hundreds of course takers.
- : Organised a Hackathon event organised by Protocol tech team at college & Rotaract's Youth parliament.
- : Awarded an 'A' Certificate in the National Cadets Corps training & supervised an obstacle training course.

Sports Activities:

- : Won a Silver medal in the Regional level Boxing tournament held in Chennai.
- : Represented B.M.S College of Engineering at Intercollegiate sports tournament in Boxing.