Baibhav Vatsa

baibhavatsa.github.io | **GH: @BaibhaVatsa** | **baibhav.vatsa@vanderbilt.edu** | (702)-350-9929

Education

Vanderbilt University, Bachelor of Science   *August 2018 - May 2022*
- **Major:** Computer Science
- **Minor:** Applied Mathematics and Engineering Management
- **Major GPA:** 3.85/4.00
- **Selected Coursework:** Mobile and Wireless Networks, Intermediate Software Design, Data Structures and Algorithms, Computer Organization & Intro to Video Production

Skills

- **Languages:** C/C++, Python, JavaScript, Java, Go, TypeScript, Dart, HTML/CSS, Elixir, and Prolog
- **Technologies:** Linux, ROS, Vue, React, Node, Flutter, TensorFlow
- **Languages:** English, Hindi, Bhojpuri, Sanskrit, and Japanese

Selected Experience

Innovation Garage | Fellow   *September 2019 - Present*
- Back-end dev team member for PWA based on research from Vanderbilt's Peabody College to help educators promote high quality teaching practices in classrooms
- NSF funded educational research project

vFOSS | Mentor   *November 2018 - Present*
- Contributed to gohugoio/hugo and baibhavatsa/python-minesweeper
- Responsible for helping others with contributing to and using open source projects and Linux

Advanced Robotics and Mechanism Applications Lab | Intern   *January 2019 - May 2019*
- Contributed to the development of GUI for the haptics devices used in the lab
- Used C++ and Qt for the same

Vanderbilt Robotics | Member   *August 2018 - Present*
- Programmer for the Rover Mining Challenge 2019 and Lunabotics 2020 competitions teams
- Implemented path planning algorithms for the rover using Python. Worked on mapping and obstacle detection with Microsoft Kinect using rtabmap_ros.
- Working on localization using ChArUco markers.

VSkills | Intern   *October 2016 - November 2016*
- A joint venture between the Government of India and the Government of Delhi
- Contributed to the C++ Questionnaire for the Skill India C++ skill-certification program

Selected Projects

Magic: The Compiling | *Go*
- Compiles basic instructions to a deck of Magic: The Gathering cards

GradeSense | *Dart, Flutter*
- Mobile app to track and record scores to help calculate and predict progress
- Written in Dart and Flutter with the provider model for state management

python-minesweeper | *Python 3*
- Minesweeper library implementation with classes for front and back-end

Crypto Notifications | *JavaScript, Vue.js, Node.js*
- Web App inspired from Silicon Valley to email the users when a cryptocurrency goes out of the desired range
- Wrote the front-end with Vue.js and the back-end with Node.js.

TopHat Helper | *Java, Microsoft Azure*
- Used Java and Microsoft Azure's Face API to write a face counting attendance system to find discrepancy between the number of students in class versus marked present.
- Won Local Hack Day at Vanderbilt University