**Apaar Bhatnagar**

(678)-670-1894 | apaarb2@illinois.edu | [apaarbh.com](http://apaarbh.com/)

Education

university of illinois at urbana-champaign | May 2023 | GPA: 3.91

Bachelor of Science in Computer Science | Minors: Political Science, Mathematics, Statistics

Courses: Discrete Structures, Linear Algebra w/ Python Application, Data Structures, Computer Architecture, Multivariable Calculus, Database Systems, Systems Programming, Text Information Systems

Professional Experience

## john deere intelligent solutions group | champaign, IL

## *Software Engineer, 04/2021 – Present*

* Designed an algorithm to transform ground truth low-light images of soil into light useful images
* Used supervised learning to build a model to detect seeds being planted into the ground and predict crop yield based off different factors, such as seed orientation and seed depth in ground
* Managed communication and work progress with a data labeling team in India

## Grainger college of ENGINEERING | champaign, IL

## *Course Assistant for CS 126, 01/2021 – 05/2021*

* Responsible for grading students’ weekly assignments completed with Java, C++ and/or Git
* Guiding students to develop well-designed code in Java/C++, with emphasis on testing
* Conducting weekly code review session and moderating discussions on coding practices for industry

## national aeronautics and space administration | Palo alto, ca

## *Research Assistant, 03/2018 – 12/20*

* Implemented data science methods to track astronaut performance under testing conditions and recommended astronaut's fit for missions
* Generated weekly reports to outline progress for each astronaut with recommendations of improvements
* Built statistical models to test hypotheses of alternative fuel for space with fellow research scientists from SpaceX and Glenn Research Center

Red Bear technologies | Atlanta, ga

Programming Instructor, 05/2016 - Present

* Teaching Python, Java, C++ and Full Stack web development to 150+ students
* Mentoring VEX IQ and FTC teams to their respective World Championships

Georgia tech synergy lab | Atlanta, ga

Research Assistant, 12/2018 – 06/2020

* Constructed a 32-node Raspberry Pi cluster and attached it to a drone to be flown to natural disaster areas, improving performance for search and rescues
* Developed 26 machine learning algorithms (movement detection, facial detection, object recognition) and white papers to identify any survivors in almost any natural disaster

Awards

* Dean’s List from Grainger College of Engineering: Top 20 percent of class (Fall 2020)
* Georgia Youth Leadership Award: Awarded to the top 20 youth leaders under the age of 20 (2019)
* First Place Georgia Tech Fair in Project Programming (2016, 2018, 2019)
* Atlanta Code Camp Distinguished Speaker: Gave lectures on concepts of data science (2018, 2019)
* Gold Presidential Volunteer Service Award: Volunteered for over 250 hours each year (2016, 2017)
* Distinguished Graduate of BalVihar Hindi School: Top of the class of 25 students (2017)