

# RISHIRAJ RAJKHOWA

(+91) 88110-80925 ♦ rishirajxrajkhowa@gmail.com

## EDUCATION

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<b>Birla Institute of Technology and Science Pilani, Goa Campus</b> <i>B.E. Electronics and Electrical Engineering</i>	<i>July 2020 - Present</i>
<b>Birla Institute of Technology and Science Pilani, Goa Campus</b> <i>M.Sc. Physics (Integrated)</i>	July 2019 - Present

## TECHNICAL STRENGTHS

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<b>Computer Languages</b>	C/C++, Python, Assembly
<b>Software &amp; Tools</b>	HTML and CSS, Bash, Matlab, Unix, Arduino

## EXPERIENCE

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<b>MCEME, Secunderabad (Indian Army)</b> <i>Summer Internship</i>	May 2021 - July 2021 <i>Lt. Col. Mihir Ghooi</i>
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- Worked in a team of 3 to generate 6 AI agents which simulated drones that could travel from a given point in plane to a point chosen by the user avoiding collisions in a randomly generated map.
- A 360 degree laser scanner was setup on each drone in Gazebo, which allows it to locate and avoid obstacles on its own, hence removing the need for programmatic, or manual control and information parsing to each drone.
- The algorithm was set up and it is functional for obstacle avoidance as well as collision avoidance. Testing was successfully done in a randomly generated environment.

<b>BITS Pilani, Goa</b> <i>Computation of electronic properties of semiconductors</i>	January 2021 - April 2021 <i>Dr. Swastibrata Bhattacharyya</i>
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- Explored various 2D semiconductor materials (Bi layer Graphene, Bulk & Mono-layer MoS<sub>2</sub>) and their electronic properties
- Various Band structures were simulated, and the DOS calculations were done using DFT calculations in quantum espresso/BURAI.
- A simple bash script was made to automate the computation process.

## ACADEMIC ACHIEVEMENTS

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Ranked in National Top 2% (amongst 1,200,000 candidates) in JEE Mains 2019

Ranked in the State-wise Top 1% (amongst 40,000 candidates) in State level Engineering competitive Exam (Assam CEE)

## COURSES

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- CS50 (Harvard)
- Fundamentals of Deep Learning - NVIDIA
- AR Development - Kalam Labs
- Computer Programming (CS F111)