

## **DEBARCHAN MONDAL**

RESEARCH SCHOLAR, UNIVERSITY OF CALCUTTA

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#### **PROFILE**

Researcher in space microbiology, bioinformatics, robotics, and instrumentation, studying microbial responses to microgravity. Skilled in experimental design, computational analysis, and tool development. Passionate about creating affordable scientific solutions to enhance research capabilities in resource-limited settings.



#### **SKILLS**

#### **Analytical Instrumentation**

Proficient in operating and interpreting data from Gas Chromatography (GC), Fluorescence Microscopy, SDS-PAGE, RT-PCR, NanoDrop Spectrophotometry, and FTIR Spectroscopy for analytical and molecular diagnostics.

#### Scientific Visualization & Data Representation

Skilled in creating clear and informative visual representations of complex datasets using tools like GraphPad Prism, Origin, R, and Python (Matplotlib, Seaborn).

#### **Embedded Systems & Microcontroller Programming**

Experienced in C/C++ based Arduino development for real-time applications involving sensor networks, actuator control, and IoT-enabled systems.

#### Web Interface Development

Adept at designing and deploying responsive, user-centric web interfaces with a focus on functionality and visual appeal.



#### **EDUCATION**

#### P.hD (ongoing)

Department of Home Science | Calcutta University

Thesis title: Effect of Simulated Microgravity on Growth, Antibiosis, And Pathogenicity of Probiotic and Pathogenic

**Bacteria** 

#### **Master of Science**

2018 - 2022

2022

Clinical Nutrition and Dietetics | Vidyasagar University **Percentage:** 82

#### **Bachelor of Science**

2016 - 2018

Nutrition and Dietetics | Vidyasagar University

Percentage: 68.75

#### CONTACT

- 9064368953
- Ocontai, East Midnapore
- debarchanmondal.github.io

# RESEARCH INTERESTS

- Space Microbiology
- Low-Cost Scientific
  Instrumentation
- Bioinformatics & Molecular
  Simulation
- Microgravity-Driven Host-Pathogen Interactions Using Cell Culture

#### LANGUAGES

- Bengali
- Hindi
- English

#### REFERENCE

#### Prof. Pubali Dhar

Dept. of Home Science, CU

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