

# UTTIYA SARKAR

Particle Physicist and Data Analyst, CERN [uttiyasarkar.github.io](https://github.com/uttiyasarkar)

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## EXPERIENCE

Post Doctoral Researcher

Ecole Polytechnique

📅 April 2021 – April 2023 📍 Palaiseau, France

- Involved in operations and performance for the data taking of the Large Hadron Collider, improving algorithms for physics object studies

Guest and Visitor Researcher

Fermilab

📅 Jan 2019 – June 2019 📍 Batavia, Illinois

- Algorithm design and testing for physics objects

## EDUCATION

Ph.D. in Experimental High Energy Physics

Tata Institute of Fundamental Research

📅 Aug 2015 – Feb 2021 📍 Mumbai, India

Masters in Physics

Indian Institute of Technology, Indore

📅 Aug 2013 – June 2015 📍 Indore, India

Bachelors in Physics

Burdwan University

📅 Aug 2010 – June 2013 📍 Burdwan, India

## PUBLICATIONS

### Journal Articles

- Search for supersymmetry in proton-proton collisions at  $\sqrt{s} = 13$  TeV in final states with high-momentum Z bosons and missing transverse momentum. (2020). [arXiv: 2008.04422](#)

### Conference Proceedings

- Sarkar, U. (2021). Searches for supersymmetry in CMS. In *9th International Conference on New Frontiers in Physics*. [arXiv: 2105.01629 \[hep-ex\]](#)

## ACHIEVEMENTS

🎓 CNRS Fellow  
Ecole Polytechnique, Palaiseau

🏆 Topper, M.Sc.  
Indian Institute of Technology Indore (CGPA 8.9)

🎬 Film-making  
Contributor to feature documentary Life in a day 2020 📺

🎵 Music  
Bronze Medalist, Tabla (Indian percussion instrument)

## ABOUT ME

"More than 7 years of work experience in **Compact Muon Solenoid** experiment at the **Large Hadron Collider**, **CERN**. Involved in **handling large data and software development**"

## LANGUAGES

Languages:

C++, Python, BASH

IDE:

VSCode, Jupyter

Version Control:

Git, Jenkins

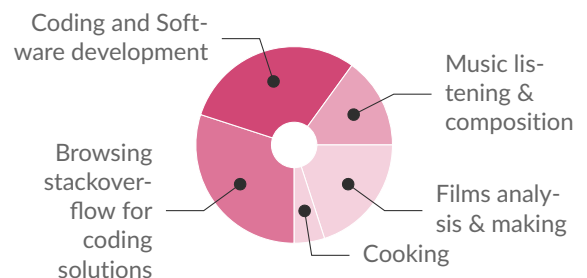
Web Development:

Java, HTML, PHP

English, Bengali, Hindi

French

## INTERESTS



## LEADERSHIP

🏆 Contact person of data analysis of a particle search

👥 Guided 2 PhD and 1 Masters student

🎤 Conference talks in more than 10 places all over the world 📺

📺 Masters Ph.D. level Teaching assistant of Particle Physics course

## CREATIVE

Film-making Music Cooking  
Bouldering Travelling Photography  
Origami Crafting Design