

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.
- Extensively used object-oriented programming in C++ and Python in IDE like VSCode and Jupyter to test and version controlling in Git.
- Used JS, php and html for creating and maintaining webpage-based data monitoring tools.

Guest and Visitor Researcher

Fermilab

📅 Jan 2019 – June 2019

📍 Batavia, Illinois

- Algorithm design and testing for physics objects.
- Developed programming skills in BASH, Linux and MacOS systems. Skills of Latex for scientific journal writing.

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
- View my full list of publications in: [arXiv](#), [google scholar](#), and [inspire](#). (No. of publications=157, h-index=38)

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

Coding and Software development

Browsing stackoverflow for coding solutions

Music listening & composition

Films analysis & making

Cooking

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