

Aqeel Ahmed

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SUMMARY

PhD physicist with strong expertise in analytical problem-solving, quantitative modeling, and computational methods. Experienced in leading complex, data-driven research projects and developing analytical models using Python, C/C++, and Mathematica, resulting in over 30 peer-reviewed publications in theoretical physics. Actively transitioning toward data science, machine learning, and AI-driven analysis, with a strong interest in applying scientific modeling expertise and technical proficiency to data-intensive roles.

SKILLS

- ◆ **Data Science:** Numpy, Scipy, Pandas, Scikit-learn, PyTorch, Scikit-HEP, Google Cloud
- ◆ **Programming:** Python, C/C++, Fortran, Wolfram Mathematica
- ◆ **Tools:** Git, Linux, LaTeX, Jupyter, Docker, SQL
- ◆ **Soft Skills:** Project Management, Communication, Critical Thinking, Team Collaboration
- ◆ **Languages:** English (Fluent), German (Intermediate)

EXPERIENCE

- ◆ Postdoctoral Researcher Oct 2020 – Dec 2025
Max-Planck-Institut für Kernphysik, Heidelberg, Germany
 - Developed new complex quantitative/mathematical models and performed data analysis
- ◆ Postdoctoral Researcher, Oct 2018 – Sep 2020
Vrije Universiteit Brussel, Brussels, Belgium
 - Built analytic models and visualized large data using NumPy, Pandas, and Matplotlib
- ◆ Postdoctoral Researcher, Dec 2017 – Sep 2018
Johannes Gutenberg University, Mainz, Germany
 - Extensive use of Python and Mathematica for symbolic and numerical analysis
- ◆ Research Associate Apr 2016 – Nov 2017
University of Warsaw, Warsaw, Poland
 - Led research initiatives, performing advanced analytic and numerical calculations.

EDUCATION

- ◆ PhD Physics (*International PhD Fellowship*) Dec 2011 – Jan 2016
University of Warsaw, Warsaw, Poland
 - Visiting Student:* University of California, Riverside, USA (1 year)
 - University of California, Davis, USA (6 months)
- ◆ M.Sc. & M.Phil Physics (*Chancellor Gold Medal*) Feb 2006 – Apr 2010
Quaid-i-Azam University, Islamabad, Pakistan

MANAGEMENT

- ◆ **Supervision:** Co-supervised 10+ Masters/PhD students during my research career.
- ◆ **Teaching:** I have taught advanced graduate courses in physics at the University of Heidelberg, University of Warsaw, Vrije Universiteit Brussel, and Quaid-i-Azam University
- ◆ **Communication:** Presented my scientific work at 50+ international conferences, workshops, schools, and seminars across Europe, Asia, and the USA
- ◆ **Organization:** I have organized 10+ international conferences and workshops
- ◆ **Scientific Referee:** Journal of High Energy Physics (JHEP), Physical Review D (PRD), European Physical Journal C (EPJC), and Advances in High Energy Physics
- ◆ **Representative:** Postdoc representative and convener of *be-h project* (www.be-h.be)