Kristijonas Mikas Silius

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EDUCATION

Master of Theoretical Physics and Astrophysics *01.2023 - current*
at Vilnius University
Focus on particle physics and programming

- Average: 9.6/10
- Thesis: Study of ttH kinematics with CMS experiment at the LHC

Bachelor of Physics at Vilnius University *09.2019 - 06.2023*

- Average: 9.1/10
- Thesis: Study of the Calibration of CROC Pixel Detectors with Sensors

WORK EXPERIENCE

User at CERN *06.2022 - current*
Research, engineering, software, hardware, analytics, big data

- CMS experiment. Working working in the CMS Inner Tracker Pixel Detector Phase-2 upgrade group.
- CMS experiment. ttH data analysis group. Optimising Higgs pT regression models. Simulating collision data for model training, optimising model structure.
- **Skills**: Python, C++, Data Science, Machine Learning

Senior Laboratory Assistant at Vilnius University *09.2023 - 04.2024*

- Working at Experimental nuclear and particle physics center Performing precision studies on particle collision data. Simulating collision processes of ttH same-sign lepton final states for ANN training.
- Optimising neural network architecture.
- **Skills**: Python, Tensorflow, Keras, Pandas, Apache Spark, Git, Data Science

Project specialist at Vilnius University *06.2022 - 12.2022*

- CMS research project. Chip testing for CMS Phase-2 upgrades for High Luminosity LHC.
- **Skills**: C++, Bash, ROOT, Data Visualization

CONFERENCES AND VOLUNTEERING

Masterclass in particle physics 2023 *03.2023*

- *Organising and moderating the activities of participants*

Open Readings 2023 *04.2023*

- *Speaker at 66th International Conference for Students of Physics and Natural Sciences*
- *Awarded for best poster presentation "STUDY OF THE CALIBRATION OF CROC PIXEL DETECTORS WITH SENSORS"*

Hadron therapy masterclass *03.2024*

- *Organized the event and prepared practical tasks for radiation therapy planning for a patient using "matRad" with photon, proton, and carbon ion irradiation*

Programming Skills

Python
C++
MatLab
C
Bash
LaTeX

OS experience

Ubuntu
CentOS
Debian

Languages

Lithuanian (Native)
English
German