# Samuel Jankových

Čárskeho 2, 84104, Bratislava, Slovakia

★ +421950442667 
★ samueljankovych@gmail.com ★ https://jansam.wieno.sk

#### **EDUCATION**

8-year Gymnasium Tilgnerova

2012 - 2020

2020

2020 -

Primary and Secondary education

Leaving exams: All grade 1 (out of 5, 1 is best)

Bratislava, Slovakia

HASCO, Georg August University of Göttingen

Summer School Grade: A (A is best)

Göttingen, Germany

Charles University, Faculty of Mathematics and Physics

Prague, Czech Republic

Grade Average: 1.00 (out of 3, 1 is best) Bc. in Physics

COURSEWORK / SKILLS

• Physics Fundamentals

• Deep Neural Networks

• Computing on HPC clusters

• Machine Learning

• Advanced Quantum Mechanics

• GPU computing

• Deep Learning

• General Relativity

• Linux administration

# **PROJECTS**

# Measurement and simulation of a temperature field Z | School Project

2019

- Heat Equation
- Thermal Imaging
- Thermal Conductivity
- https://arxiv.org/abs/1909.01460

#### Fake $\tau$ background in $\tau^*$ search $\square$ | Summer School Project

2021

- Fake Factor Method
- $\tau$  classification
- ATLAS Collaboration
- https://drive.google.com/file/d/1k7So9AuAj62re\_s0pZRw0U2cgkDUlR0y/view?usp=sharing

#### THESES

#### Quark/Gluon Jet Tagging 🗷 | Bachelor Thesis

2023

- Quark and Gluon Jets
- ATLAS presentations
- Jet Flavour Tagging
- Phase Space Variables
- Jet Constituents
- Monte Carlo Simulations
- Transformer Architecture
- BDT
- Fully Connected Networks
- https://github.com/jansam123/JIDENN

# PROFESSIONAL INTERESTS

- Particle Physics
- CERN research
- Standard Model
- Beyond Standard Model Physics
- Deep Neural Networks in HEP research
- Transformer Architectures
- Software Design

- Clean Code
- Advanced Statistics
- GPU computing
- Quantum Chromodynamics

# AWARDS AND SCHOLARSHIPS

Scholarship for Excellent Study Results 2nd year Bc. Amount:  $770 \in$ 

Charles University, Prague

2022

2021

2020

Scholarship for Excellent Study Results

Summer Term 1st year Bc. Amount: 770 € Charles University, Prague

Scholarship for Excellent Study Results

Winter Term 1st year Bc. Amount: 640 € Charles University, Prague

# TECHNICAL SKILLS

**Languages:** Python, C, C++

Frameworks: ROOT, Tensorflow, Scikit-learn, Uproot, Hugo

Technologies: MacOS, Linux, Git, VS Code, Docker, Slurm, Condor, LATEX

# SPOKEN LANGUAGES

English: C1 German: B1 Slovak: native