



CAIO LAGANÁ FERNANDES

Ph.D Physicist
Developer

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 São Paulo, Brazil linkedin.com/in/caiolagana

SUMMARY

Possess a Ph.D. in High Energy Nuclear Physics at the European Organization for Nuclear Research (CERN). Awarded the Best Doctorate Thesis Prize by the Brazilian Physical Society in 2020. Experienced in programming languages, software development and data analysis.

SKILLS

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|----------------------------|--|
| Portuguese (native) | Ability to understand complex systems and work out efficient solutions to intricate problems |
| English (fluent) | |
| Italian (fluent) | |
| French (functional) | |
| German (beginner) | |

PROJECTS

| | | |
|-------------------|--|---|
| C++ | Hypernuclei Search at CERN This C++ project was written as part of my Ph.D program. It searches for the Λnn and Λpn hypernuclei in high-energy Pb-Pb collisions at the Large Hadron Collider. The script was ran over thousands of terabytes of data at CERN's computing infrastructure. | https://github.com/caiolagana/LnnTreeCreator |
| Visual C#, SQL | Hydroelectric Power Plant Simulator Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. | https://github.com/caiolagana/PowerPlantSimulator |
| Python, AngularJS | AI Analysis of Legal Documents Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. | https://github.com/e-fluxus/ia |

FORMAL EDUCATION

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|-------------|---|----------|
| 2013 - 2017 | Doctorate in Physics University of São Paulo (USP) with one-year exchange program at European Organization for Nuclear Research (CERN). <i>Title:</i> Evidence for the existence of the Λnn hypernucleus with the ALICE detector | USP/CERN |
| 2010-2012 | Master's in Physics State University of São Paulo (UNESP) <i>Title:</i> Femtoscopia de colisões próton-próton no detector CMS do Large Hadron Collider | UNESP |
| 2006-2010 | Bachelor's in Physics Scholarship from Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) | USP |

COMPLEMENTARY EDUCATION

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|------|---|----------|
| 2012 | Excellence in Detectors and Instrumentation Technologies Fermi National Accelerator Laboratory, Illinois (US) | Fermilab |
| 2012 | Short Term Course in Laboratory Techniques Brookhaven National Laboratory, Upton (US) | BNL |
| 2010 | Short Term Course in Data Analysis Tools at CERN European Organization for Nuclear Research, Meyrin (Switzerland) | CERN |

EXPERIENCE

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|-------------|---|----------------|
| 2014 | Assistant Professor • Working hours (weekly): 6h • Course: Laboratório de Física Moderna | IFUSP |
| 2017 - 2019 | Visual C# Developer • Working hours (weekly): 40h | AQS Tecnologia |
| 2019 | Scientific Journal Referee • Physical Science International Journal | USP |
| 2020 | Scientific Journal Referee • Caderno Brasileiro de Ensino de Física | USP |

| | | |
|----------------|--|----------|
| 2022 | Assistant Professor <ul style="list-style-type: none">• Working hours (weekly): 6h• Course: Física III | POLI-USP |
| 2022 - Current | Python Developer <ul style="list-style-type: none">• Working hours (weekly): 40h | E-FLUXUS |

PUBLICATIONS

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| x/2023 – x/2023 | Lorem ipsum dolor sit amet, consectetur adipiscing elit. <ul style="list-style-type: none">• Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.• Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. SQL / Excel | Company |
| x/2023 – x/2023 | Lorem ipsum dolor sit amet, consectetur adipiscing elit. <ul style="list-style-type: none">• Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.• Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. SQL / Excel | Company |
| x/2023 – x/2023 scholarship holder | Lorem ipsum dolor sit amet, consectetur adipiscing elit. <ul style="list-style-type: none">• Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.• Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. SQL / Excel | Company |