Currently, we are looking for a person for a position of:

**AI/ML Expert**

**Who we are: One of recently awarded 13 European "Teaming for Excellence" Centres**

NOMATEN CoE is formed through a partnership between NCBJ (Poland), CEA (France) and VTT (Finland). The NOMATEN CoE has received 7 years of joint financial support from the Foundation for Polish Science (FNP) and the European Commission. These long-term funds and it's novel organizational structure ensure the sustainability of NOMATEN CoE.

NOMATEN plans to develop in-house functional programs and applications that will aim at understanding client requirements and how they translate in application features. The project goal is to produce fully functional software applications according to requirements and market/industry needs. The focus of these applications will be both popular strategies in materials informatics, as well as in-house developed approaches for dimensional reduction, machine learning and simulation of Large Data. We will build a software platform to facilitate data-driven methods of analyzing and predicting materials' properties. An example is an easy-to-use GUI module for processing imaging data sets from external data-bases, locally stored, as well as popular libraries such as the Materials Project, Citrination, Materials Data Facility, and Materials Platform for Data Science. It will provide implementations for an extensive library of feature extraction routines developed by the materials community, and ultimately produce material configuration supercells that can be simulated for mechanical and atomistic properties. Our projects are expected to integrate closely with machine learning and data analysis packages already developed and in use by the Python data science community, so the knowledge of Python is a prerequisite.

NOMATEN Centre of Excellence offers access to one of the largest computing clusters in Poland, as well as the possibility to work together with experts from our international collaboration network. As the expected work is highly creative we can also provide opportunities for personal and career development. We encourage, in particular, candidates with a combination of interests spanning various research domains (from physics to medicine) and the Artificial Intelligence and Machine Learning. We expect our team members not only to participate in AI/ML application building workflows but also in talking to scientists producing and / or analyzing data, contributing to piloting research workflows on all levels.

**We are looking for a qualified expert on artificial intelligence and machine learning to use and combine existing code, functional programs and applications, using Python, Numba and Tensorflow or Keras libraries.** S/he will work as part of a team and individually with little supervision. A great AI/ML expert has excellent knowledge of one or two popular programming languages (Python, C# or/and Java). They must be familiar with a variety of operating systems and platforms (MacOSx, Linux, Windows). The ideal candidate will also have an analytical mindset and a keen eye for detail. The goal is to write “clean” and flawless code to produce fully functional applications according to requirements.

**Responsibilities**

* Understand use-case requirements and how they translate in application features.
* Collaborate with a team of researchers and HPC professionals to set specifications for new applications.
* Design software prototypes according to specifications.
* Write high quality source code to program complete applications within deadlines.
* Perform unit and integration testing before launch. Conduct functional and non-functional testing.
* Troubleshoot and debug applications.
* Evaluate existing applications and libraries to reprogram, update and add new features.
* Develop technical documentation and handbooks to accurately represent application design, code and usage.

**Requirements**

* Proven experience as AI/ML expert.
* Experience in Tensorflow, Keras and SKLearn.
* Ability to fluently program in at least one programming language such as Python etc. and know another one very well.
* In-depth knowledge of programming for diverse operating systems and platforms using development tools.
* Excellent understanding of software design and programming principles.
* A team player with excellent communication skills.
* Analytical thinking and problem-solving capability.
* Great attention to detail and time-management skills.
* Fluency in English, spoken and written.
* BSc/BA in computer science, engineering or relevant field; MSc/MA will be appreciated.
* Certified application developer is a plus.

**We offer:**

* A chance to make ones' mark by participation in the creation of a new international Centre of Excellence – NOMATEN.
* Personal and professional development with a diverse range of tasks and challenges.
* Working with cutting edge technology at one of the largest supercomputer centers in Poland.
* Employment contract.
* Stable working conditions without overtimes and atmosphere of teamwork.
* Funding for external and internal training.
* Additional annual salary and other social security benefits.
* Company transport from Warsaw to Świerk and backwards.
* Health service at NCBJ (basic medical care).

**Contact person:** Magda Jędrkiewicz (magdalena.jedrkiewicz@ncbj.gov.pl)

CV in English should be submitted to: magdalena.jedrkiewicz@ncbj.gov.pl

**As an attachment to your application please sign and enclose the following declarations:**

I agree for my personal data included in the application documents to be processed by National Centre for Nuclear Research with its registered office in Otwock, 7 Andrzej Sołtan Street, 05-420 Otwock, for a period of 12 months from their submission, in order to carry out future recruitment processes.

Information in accordance with Article 13 RODO on the processing of personal data:

**The Personal Data Controller of your personal data is the National Centre for Nuclear Research** (hereinafter referred to as Controller or NCBJ) with its registered office in Otwock, 7 Andrzej Sołtan Street, 05-400 Otwock.

Your personal data will be processed for recruitment purposes on the basis of applicable law, including the Labour Code. Data not required by law, provided by you in your documents, will be processed on the basis of your consent. Your consent is given by the transfer of this data.

The full content of the information clause of Article 13 RODO is available at https: <https://www.ncbj.gov.pl/en/information-clause-personal-data-processing>