

# Maynooth University Ollscoil Mhá Nuad

# Maynooth University Hamilton Institute EU PhD Positions

(4 Year PhD)

# **Basic Description**

Applications are invited for a number of fully funded full-time EU PhD studentships available at Maynooth University (Ireland) in the area of Bayesian machine learning supervised by: Professor Andrew Parnell CStat, Hamilton Institute, Maynooth University.

Areas include: Bayesian additive regression trees, multivariate factor models, anomaly detection, and closed-loop control theory. Company partners include IBM and Clavis Insight. Further application areas include bioinformatics and environmental monitoring.

# Candidate Profile

Applicants should be prepared to start between July and October 2018, and have a thorough grounding in Bayesian statistics and R.

#### Stipend

Each PhD studentship comprises a tax-free stipend of EUR18.5k over 4 years, a computing budget, and a generous travel allowance.

All queries should be addressed to andrew.parnell@mu.ie.





## Faculty and Research Institutes

The Faculty of Science & Engineering comprises the Departments of Electronic Engineering, Theoretical Physics, Experimental Physics, Mathematics & Statistics, Biology, Chemistry, Computer Science, and Psychology. The role of the Faculty is to co-ordinate the academic activities of individual departments, to oversee the strategic development of departments and to support interdepartmental programmes. The University has also developed a number of interdisciplinary institutes to support excellent research in the priority thematic areas and to build research capacity across disciplines. These include the Hamilton Institute for mathematics, communications and computation.

# The Department

Founded in 2001 with support from Science Foundation Ireland, the Hamilton Institute has been internationally recognized for its work across communication networks, mathematical biology and fundamental mathematics. Current areas of interest for the institute include the improvement of privacy in online systems, the application of probability to immunology and the enhancement of randomised network protocols.

Graduate education has always been a core activity of the Hamilton Institute with 35 PhD students and 17 MSc (Research) students graduated since 2003. The institute, in collaboration with the Centre for Telecommunications Value Research (CTVR) in Trinity College Dublin, established the Network Mathematics Graduate Programme (funded under PRTLI 4) and was actively involved in the national Telecommunications Graduate Initiative (funded under PRTLI 5).

Further information on the Hamilton Institute is available at https://www.maynoothuniversity.ie/hamilton

### The University

Maynooth University is one of the four constituent universities of the National University of Ireland and in 2017 was placed in the global top 50 universities under 50 years old in the Times Higher Education World University Rankings. Formally established as an autonomous university in 1997, but tracing its origins to the foundation of the Royal College of St. Patrick in 1795, Maynooth University draws on a heritage of over 200 years' commitment to education and scholarship. It is located in the University town of Maynooth, 25km from the centre of Dublin, Ireland's capital city.

The University is a modern institution - dynamic, research-led, engaged, and grounded in the traditions of liberal education. With more than 11,000 students, Maynooth is Ireland's fastest-growing university, yet we retain a collegial campus culture that is central to our ability to bring significant interdisciplinary expertise to bear in tackling some of the most fundamental challenges facing society today.





Maynooth University is embarking upon a new and exciting phase with the development of the *University Strategic Plan 2018-22*, with a vision to consolidate the international reputation of Maynooth University "as a university known for outstanding teaching, excellent research, a global outlook, effective engagement with the society we serve, and our distinctive approach to the challenges facing modern higher education."

The plan builds on the successes of the *University Strategic Plan 2012-17, which* set seven strategic goals for the university:

- to offer students an outstanding university education, the best available in Ireland, an education which challenges and supports all students to achieve their full potential, and prepares students for life, work and citizenship, and for complexity, diversity and change;
- to be recognised as playing a leading international role and being the clear national leader in a number of thematic areas of research that address the major societal challenges of the 21st century;
- to achieve a step change in our international activities, doubling the number of international students on campus and doubling the number of domestic students spending time abroad, in order to create a truly intercultural and multilingual institution;
- to strengthen our engagement with all stakeholders through sustained partnerships with enterprises, communities, civil society and public bodies, to build support for the mission of the university, to serve the needs of society, and to open new opportunities for research and learning;
- to maximise our unique and distinctive contribution to the national system of higher education through a set of purposeful and sustained strategic partnerships at regional and national level, and to extend our international reach through a network of global partnerships;
- to be an excellent place to work, known for a collegial ethos which empowers all staff to contribute fully to the development of the university;
- to enable the achievement of ambitious strategic objectives in challenging circumstances through careful planning, excellent services and infrastructure, and sound governance and management.

The university has distinctive institutional strengths in six thematic priority areas:

- Human Cultures, Experience & Creativity;
- Humanities in Practice: Sources, Resources & Discourses;
- Human Health;
- Mathematics, Communications and Computation;
- People, Place and Environment;
- Social and Economic Transformations.



