



UNIVERSITY OF  
BIRMINGHAM

# MSc AI and Machine Learning

**Peter Tino** – Director MSc AI and ML

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UG33 Comp Sci

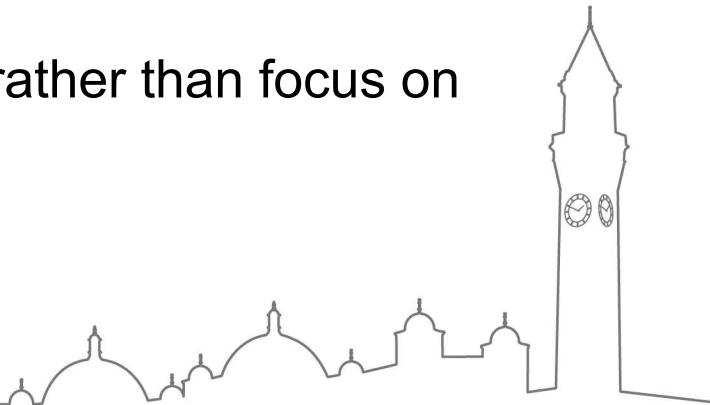


# Support

- Personal tutor:** General advice and support skills development
- Program Director:** Questions pertaining to the program as a whole
- Welfare officers:** Non-academic emotional, physical and wellbeing support (e.g., extensions)
- Student Experience Officer:** Social and supportive activities
- Education Support Office:** Support throughout your time with us
- Student representative:** Represent the student body and communicates concerns to lecturers/welfare/program director

# **MSc AI-ML - the vision**

- **Understand** rather than know about
- **Formulate models** rather than use off-the-shelf ones
- **Diversity of methodological approaches** rather than focus on the most popular techniques
- **Advanced course** - Research focus



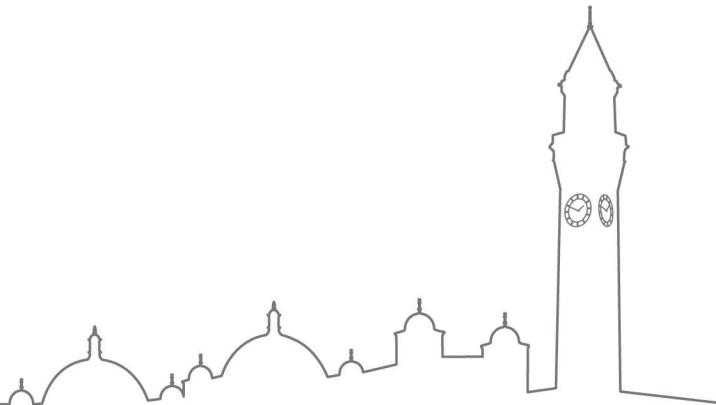
# Strong mathematical background needed

- Calculus, Probability Theory, Statistics, Linear Algebra etc.
- **Maths foundations of AI and ML** in term 1



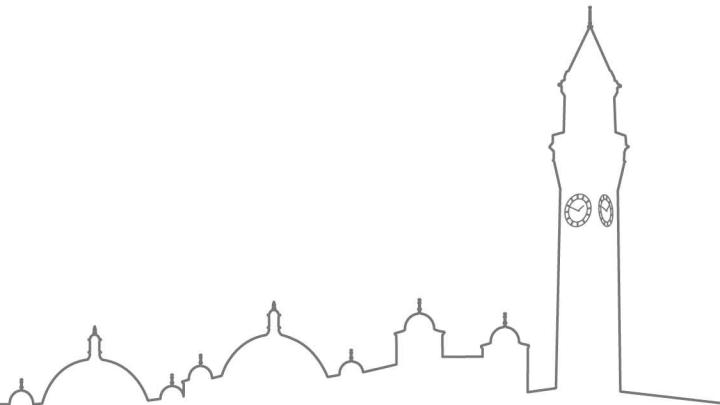
# Autumn

- Mathematical foundations of AI and ML
- Machine Learning
- Intelligent Robotics
- IDA
- Neural Computation



# Spring

- **Current Topics in AI and ML**
- Computer Vision and Imaging
- Visualisation
- Robot Vision
- NLP
- Evolutionary Computation



# Summer

- **AI and ML Project**
- Strong research component
- Project proposal, inspection, demonstration, thesis
- Demonstrate what you have learnt in the course!

