



Department of Computer Science and Technology

Prof. Nicholas D. Lane
Professor of Machine Learning Systems
Fellow of St John's College
Co-founder & CSO, Flower Labs

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To whom it may concern,

My name is Nicholas Lane, lead instructor of the course 'Deep Learning' and I certify that student Xinyu Jiang completed the course over 2 weeks of study in Cambridge, UK during February 2024.

The course provided an introduction to Deep Learning and introduced core competencies of the subject in an easy to understand and accessible manner that didn't require any previous knowledge of or experience with programming, statistics, or deep learning. Students developed a fundamental knowledge and the skills necessary for further study of deep learning.

The student displayed a strong aptitude for learning, quickly grasping new concepts. His industrious work ethic, combined with a keen research approach, allowed him to actively contribute to studies and collaborative projects. Notable attributes include outstanding problem-solving skills, as he consistently identified and promptly resolved challenges in class.

Forming positive relationships with fellow group members, the student adeptly balanced independent work with effective collaboration. His willingness to assist others within the program was evident through voluntary contributions.

In conclusion, I am confident the student will continue to excel in his future academic endeavours.

Best,

Nic Lane

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Bio: Nic Lane is a full Professor in the department of Computer Science and Technology at the University of Cambridge, where he leads the Machine Learning Systems lab (CaMLSys). Nic is also a Fellow of St. John's College. Alongside his academic appointments, he is the co-founder and Chief Scientific Officer of Flower Labs (<https://flower.dev/>), a venture-backed AI company (YC W23) behind the Flower framework. Until early this year, Nic was the Lab Director at Samsung AI in Cambridge. He was responsible for the technical direction of this 50-person lab that has an agenda of broadly advancing artificial intelligence in service of future Samsung products and services; and in addition to leading the lab -- Nic personally directed teams focused on distributed and on-device forms of learning. Prior to his role at the University of Cambridge, Nic was an Associate Professor in the Computer Science department at the University of Oxford. At Oxford, he was a member of the Cyber-Physical Systems group, taught machine learning on the Professional Masters Program (PMP) and was a Fellow of Kellogg College. Earlier in his career, Nic held dual appointments at University College London (UCL) and Nokia Bell Labs; at Nokia, as a Principal Scientist. In recent years, Nic has specialised in the study of efficient machine learning under computational constraints, and over the last seven years he has pioneered a range of embedded and mobile forms of deep learning. Nic has received multiple best paper awards, including ACM/IEEE IPSN 2017 and two from ACM UbiComp (2012 and 2015). In 2018 and 2019, he (and his co-authors) received the ACM SenSys Test-of-Time award and ACM SIGMOBILE Test-of-Time award for pioneering research, performed during his PhD thesis, that devised machine learning algorithms used today on devices like smartphones. Nic served as the PC-chair of ACM MobiSys 2019, a role he has performed also for ACM HotMobile and ACM SenSys in the past. Nic was the 2020 ACM SIGMOBILE Rockstar award winner for his contributions to "the understanding of how resource-constrained mobile devices can robustly understand, reason and react to complex user behaviours and environments through new paradigms in learning algorithms and system design." Prior to moving to England, Nic spent 4-years at Microsoft Research based in Beijing as a Lead Researcher. He received his PhD from Dartmouth College in 2011. Nic also received an M.Eng from Cornell University (2004) and a B.Sc (Hons) from the University of Waikato (2001)