Reference for Julia Goh

I am pleased to provide this reference letter for Julia Goh, an exceptional Computer Science graduate at UCL. She is studying MEng Computer Science with a minor in Intelligent Systems (expected First Class Honours). As an indication of her excellence, she achieved the Cambridge Outstanding Learner Award on "Top in the World Mathematics" for scoring 100% in the subject during GCSE A-Levels. In her final year thesis, she worked with Generative Artificial Intelligence (AI) for Music where she produced an excellent thesis with successful results in image-conditioned music Generative AI and music-conditioned image Generative AI.

As background on myself, I am Philip Treleaven, UCL Professor of Computer Science, successfully graduating over 90 PhD students. In addition, I have led a number of pioneering research projects developing much of the early financial fraud detection software with UK financial institutions and helping develop the first European Algorithmic Trading platform with a leading Investment Bank. So I feel confident in assessing Julia's excellents.

Her main fields of study include Machine Learning (ML), Robotics, Computer Graphics and Networks, where she also worked on research in multi-agent reinforcement learning (MARL) in portfolio management and <u>network analysis for programming languages</u>. Her strong technical skills made her especially well-equipped for the ML Engineer, Full Stack Software/Systems Engineer and similar positions, where her tech stack non-exhaustively includes Python, Node.js, React.js, Prisma, Docker, and more. She is also fluent in three languages: English, Mandarin Chinese and Malay.

In terms of work experience, she worked as a ML Engineer at <u>Unify</u> for over a year, where she was part of the Web and Cloud team, responsible for full stack software development with Python, Prisma database and Javascript (inc. Node.js, React.js, etc.). This includes developing the <u>Model Hub</u> and <u>Console</u> products on Google Cloud Platform (GCP) and/or Amazon Web Services (AWS). She also led the Applied team in expanding their <u>Ivy Models</u> ecosystem from scratch to more than 15 different models within 4 months.

Previously, she was a System Engineering Intern at Infosys where collaboration took place in a team of three to solve the ML problem of Question and Answering (QnA) <u>chatbot for clinical tabular data</u>. Furthermore, she worked in Bridges for Enterprise (BfE) as a Cambridge Technology Associate for revamping their <u>technology</u> <u>website</u>.

I am pleased to recommend Julia and please contact me if you have any further questions.

Philip Treleaven p.treleaven@ucl.ac.uk