

Company Recruitment Team

January 3, 2020

GOOGLE INC.
1600 AMPHITHEATRE PARKWAY
MOUNTAIN VIEW, CA 94043

Job Application for Software Engineer

Dear Sir / Madam,

I hope to pursue research in the field of Artificial Intelligence (AI), particularly in the intersection between theoretical mathematics and AI. During my undergraduate studies in Yale-NUS College, I was privileged in receiving a robust, multidisciplinary education, especially in the areas of Mathematics, Statistics, and Computer Science. I had been drawn towards topics in theoretical Mathematics, such as discrete mathematics, graph theory, and modern algebra, while also having a passion for deep learning and AI. Thus, I worked towards finding opportunities in the intersection of these two fields. I pursued this during my research project with Professor Isabelle Augenstein at her CopeNLU lab in Copenhagen, Denmark. The project, among many things, involved exploring the effectiveness of Neural Networks in learning hidden structures of knowledge graphs. It exposed me to the limited effectiveness of current Deep Learning techniques when used on non-conventional mathematical structures, like graphs, and indicated a potential for important research to be conducted.

The programme offered by the University of Amsterdam (UvA) is exactly what I'm looking for as my next step on this journey due to UvA's particular focus on AI research in a multidisciplinary setting, and the research-oriented nature of the Master's programme itself. Looking into the research done at UvA, I was excited to find an impressive collection of theoretical AI papers, such as the papers on Graph Convolutional Networks by Thomas Kipf and Max Welling, which I had referenced in my research project. I was also particularly impressed by UvA's research on AI's wider impact on society as well, as it demonstrates UvA's leadership in responsible, ethical AI development.

Furthermore, the AI Master programme's strong emphasis on providing a solid foundation across the major fields in AI is exactly what I am looking to gain during my Master's programme. The required modules provide a robust coverage of the fundamentals of AI, and the flexibility in the electives allows me to deep dive into specific interest areas. My previous coursework has allowed me to build a strong foundation in Mathematics and Statistics, and the theoretical foundations provided in the course would be the perfect bridge between my experiences and the research I hope to do.

Finally, I wish to be nominated for the Amsterdam Excellence Scholarship, as it would enable me to afford this program. Coming from a humble background, receiving the Global Leader Scholarship from my undergraduate institution allowed me to afford the cost of my Bachelors degree. Having attained a GPA of 4.73 / 5.00, while concurrently undertaking a long list of leadership roles in the college, I believe that I have embodied the expectations set upon me as a scholarship recipient. Through the Amsterdam Excellence Scholarship, I do hope to have the

Sincerely,

Zhong Xuan Khwa

Attached: Curriculum Vitae