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To the hiring committee it may concern:

## Dear Committee:

I write you to recommend my student, Mr. Michael Nefiodovas, and to explain why I believe he will be a valuable addition to your organisation.

I met Mr. Nefiodovas in my capacity as unit designer and coordinator for the Australian Mathematical Sciences Institute (AMSI) Summer School course Mathematical Optimisation and Modern Applications with Python. I designed and ran this course with Dr. Hoa Bui. Dr. Bui and I work in a research institute that specializes in utilizing mathematical optimisation for industry partnerships, and AMSI is a national organisation that builds bridges between university mathematicians, government agencies, and Australian industries. AMSI competitively selected our course to run on the merits of its relevance to industry needs, and the course was further selected for sponsorship by the professional society Australia and New Zealand Industrial and Applied Mathematics (ANZIAM). The 17 students who took this course for credit represent the best and brightest upcoming mathematicians in Australia, particularly among those interested in working in fields that utilize data science, machine learning, and inverse problems for the sciences and engineering.

Even among such an outstanding cohort, Mr. Nefiodovas stood out to us almost immediately. He was a leader among his peers, facilitating online discussions, creating his own supplemental exercises to build understanding, and even coding additional algorithms that were not among the required coding assignments. To choose one example, I was particularly impressed by his implementation of the basis pursuit algorithm for signal recovery with compressed audio, an implementation he tested on a recording of himself speaking. On the final exam, Mr. Nefiodovas achieved an exceptional mark of 103% (disclosed with permission). In order to do so, he derived a formulation of the Alternating Direction Method of Multipliers (ADMM) algorithm for finding an  $l_1$  centroid via stochastic consensus. This is a very hard data science problem that many practitioners are still unaware is solvable. Mr. Nefiodovas derived an algorithm to solve this problem in under 48 hours, and while simultaneously solving all of the other challenges on the exam. Even more impressive, four weeks earlier he had never worked with operator splitting methods like ADMM before. His hard work and dedication is further reflected in an over-all course score of 98.7% (disclosed with permission).

Mr. Nefiodovas's abundant scientific curiosity and enjoyment of the learning process combine to make him a natural problem solver. He is also an excellent communicator, as evidenced by the andragogical quality of the mathematics tutorial videos he creates and posts on Youtube. Moreover, in his engagements with his fellow students, he demonstrated a clear capacity for leadership and teamwork. Mr. Nefiodovas places a high value on learning and growth opportunities, as reflected in the fact that he was the only for-credit participant to travel from Western Australia for this Melbourne-based Summer School course.

Mr. Nefiodovas will be well utilized as part of a problem solving team. Furthermore, a prospective employer that well utilizes Mr. Nefiodovas will ensure that he has the development opportunities to ultimately move into a position leading such a team, mentoring others, and communicating insights to important stakeholders. Altogether, I recommend him to you without reservation.

Yours faithfully,

Dr. Scott Boivin Lindstrom