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Arjan Singh Puniani Rigetti Quantum Computing 2855 Telegraph Ave. Suite 517 Berkeley, CA 94705

Dear Mr. Singh,

Quantum computing has fascinated me since my very first physics class in high school. The promises it posed – lightening-fast computing speeds and the invalidation of RSA encryption, amongst other breakthroughs – seemed incredible, impossible even. Since then, I have studied quantum computing and error correcting codes under William Wootters, one of the founders of quantum information theory, and realized its commercial viability. It would be a dream to manufacture some of the world's first commercial quantum computers with one of the most promising companies in the endeavor, Rigetti Quantum Computing. I believe my academic training involving quantum theory and low-level programming coupled with the research I have conducted in machine learning and automated planning prepare me for a career as a quantum engineer with Rigetti.

I am a quick learner who expands and innovates on the knowledge I acquire; my thirst for knowledge is unsatiable once I find something interesting. I have had the opportunity to advance the state-of-the-art in knowledge engineering as an applied artificial intelligence researching contractor at the Naval Research Laboratory this summer, continuing into my fall semester at Williams as Senior Honors Research. Working under the Head of the Adaptive Systems Section on the Autonomous Squad Member Project (ASM), I used information retrieved from different sensors of the automaton to amortize the difficulty of increasing its knowledge about the world, all in Common Lisp. I also implemented a knowledge engineering algorithm in Python for comparison against a proprietary knowledge engineering algorithm for the purposes of automated planning and machine learning.

My experiences at the Naval Research Laboratory, my education at Williams, and my lifelong dream of helping to build a quantum computer demonstrate the breadth of my knowledge and passion in both academia and industry and make me the ideal candidate for a junior quantum engineering position at Rigetti. I appreciate your consideration for the position.

Sincerely,

Rahul Nath William College Class of 2015 Computer Science and Economics