## Rahul Nath

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Soundcloud is one of those rare services that allow musicians to get their footing in a musical career while also allowing music lovers the world over to enjoy and connect in underground musicians' art, in a way no other music service has been able to do. I use Soundcloud every day as a listener, artist, and coder; my experience with the service has spurred many ideas on how to make the service even better than it is already, and I know I am up to the challenge. As a Computer Science and Economics double major at as challenging a school as Williams, I am constantly faced with handling ambiguous or undefined challenges. In confronting these challenges I have assembled an arsenal of tools that aid me in thinking creatively and abstractly. My talents in combating a variety of different technical challenges are no more evident than in my past internship and research experiences.

I am a quick learner who expands and innovates on the knowledge I acquire. I especially love to learn about new technologies, which is why I spent this past summer developing applications using new technologies at Mobiquity Inc. I created an indoor location tracking Android application that logged user location using a combination of Amazon Kinesis and strategically located iBeacons. I also developed test apps that transmitted data to Amazon EC2 instances using secure OAuth authentication methods and aimed for scalability on the server side, giving me intimate knowledge of the MEAN stack. I was also lucky to have direct guidance from the CTO, Android Platform Lead, and head of the Research and Development Lab. The projects I worked on have become products that Mobquity markets today under its deltalQ<sup>TM</sup> behavioral change platform.

While my experiences at Mobiquity gave me hands-on design, business, and software engineering experience, I also had the opportunity of advancing 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 in start-ups, mid-sized companies, and government research labs demonstrate the breadth of my knowledge in both academia and industry and make me the ideal candidate for a software engineering position at Soundcloud. I appreciate your consideration for the position.

Sincerely,

Rahul Nath
William College Class of 2015
Computer Science and Economics