**Statement of Purpose**

I am certain that due to my personal motivations, passion and prerequisite skills, I am an ideal candidate for the Professional Masters program in Big Data at Simon Fraser University. In the last two years of my undergraduate studies, as my passion for computing science grew, it became increasingly clear to me that I wanted to continue my education at a higher level. I did not take the task of searching and evaluating potential programs of interest lightly, and after a year of sifting through the space of potential opportunities available for my future, my ambitions converged on a single path – an industry-oriented program pertaining to big data. Big data is not only the most exciting and rewarding field of study that I can foresee for myself, but also a field at the limits of my domain expertise. While bootstrapping my solid foundation in computing science will serve me well, I know that this powerful, fast moving field will force me to adapt in new ways, adopt new perspectives, and overcome challenges of unprecedented magnitude. Upon investigating the big data program at SFU, I knew I had found the program best suited to expose me to leadership and guidance in overcoming real big data challenges facing our world today.

One highly appealing attribute of the big data program for me, is the fact that it is industry oriented as opposed to research-oriented. Although I am fascinated with the research side of big data, it appears to me that, at this time, the role of the practitioner is not only more valuable, but also more exiting than that of a big data researcher. The explosive rate at which cutting edge big data research is being conducted is not matched by the rate at which it is being implemented in industry. There is a growing need for specialized big data engineers in all sectors of society. I spend much of my free time investigating groundbreaking big data research, and it is my dream to be a medium through which these new discoveries can be leveraged to solve real world problems.

Throughout my undergraduate career, I have been exposed to an incredibly diverse set of technical domains, with software engineering and pure math as particular strengths. I have worked on a multitude of technical projects, both as an individual and as a team. These have ranged from re-implementing the distributed social network *Diaspora* using python with the django web-framework, to a 3d modeling project built to assist a PhD student who was studying how gender has an effect on hand gestures made while story telling. The two most fascinating classes that I completed in my undergraduate degree were Machine Learning and Probabilistic Graphical Models. Both classes were research oriented and involved a group project. In the former my group implemented an instrument recognition classifier to label audio tracks by the instruments they contain, in the ladder my group attempted to implement a classifier which, given only EEG data, is able to determine if a subject has the intention of movement. These classes opened my mind to understanding how powerful big data solutions can be, and the potential impact that they will have on the future of society.

Since graduating university I have made a strong effort to continue my education via various disciplines. I have engaged in activities such as contributing to open source software, reading books, and completing online courses ranging in topics from deep learning and blockchain technology to complex analysis and financial modeling. I have also been putting effort into enhancing my workflow, and optimizing my use of computational tools. I have been striving to reach a higher profficiency with linux operating systems and the command line. I have also transitioned to using vim as a programming editor, which to the unfamiliar, is no trivial task. After years of practical experience with many different stacks of technologies, working on different levels of abstraction, tackling fundamentally different problems, the breadth of my experience has allowed me to begin to see a big picture in computing. I expect the gains in my career over the next five years to be nothing short of the last five.

I want to be able to use the most powerful modern tools to solve problems. It is apparent to me that Big Data solutions are the most powerful tools coming out of the science, technology, and business pipeline and this program is the smoothest path to understanding these tools and how to apply them. Please consider me as a potential student for this most exciting opportunity.

Shawn Anderson