I am writing to apply for the tenure-track position in mathematics as advertised on the Employment Information in the Mathematical Sciences List. I am a graduate student at Harvard University working in Algebraic Combinatorics under the direction of Professor Stanton Lochs. I expect to complete my PhD by May 2017.

As my CV illustrates, I have a broad range of working experience in the industry; fortunately, most of the projects, which are in the past and on going, are immensely focused on researching and engaging state of the art machine learning algorithms into practice. I participated in the sentiment analysis project on Twitter and Starbucks dataset with Tenpoint7 which is the fast growing data consulting business based in Seattle, as a role of data analyst. In this project, I performed numerous natural language processing (NLP) techniques and machine learning algorithms to classify users comments and reviews on giant social networks; at the end, the final analysis, which essentially influences business decisions and strategies, not only derived the adequate insight of customer behaviours, but also significantly increased up to twenty-seven percent of the revenue confirmed by Tenpoint7 partners. Recently, I had an opportunity to coporate in an academic project, which the aim is constructing a formal representation of cuisine recipes for machine learning models, with Professor Maurizio Fillipone at EURECOM, who is a famous and comprehensive researcher in Bayesian optimization and Gaussian process. In spite of researching alone, it turns out a valuable experience, which reinforces my capability of carrying out independently research and lateral thinking. I sucessfully designed an unique ingredients parser based semantics for recipes which particularly outperforms similar parsers on the field, which is one of the remarkable project outcomes.