

September 9, 2019

To Whom It May Concern:

It is my great pleasure to strongly support, with no reservations, **Mr. Andres Cremisini's** application for employment in your organization. Andres is one of my most promising graduate students, currently nearing the completion of his Master of Science degree in Data Science (for a short bio of myself, see the end of this letter). He is highly intelligent, engaging, creative, a hard worker, and has top-notch academic performance. You would do well to employ him.

I have known Andres Cremisini since late 2016, when he approached me to discuss his interest in Natural Language Processing and Computational Social Science for application to problems of interest to government and society. He has an unusual background for a prospective computer scientist: namely, he had until that time been employed as musician, music teacher, and composer, having obtained an M.A. in Music Composition from U.C. Berkeley, and having pursued part of a Ph.D. in Music Composition. He was becoming interested, however, in certain problems that he realized could only be tackled by computation, and so was exploring the possibility of taking some classes, or perhaps even pursuing his Master of Computer Science degree. I recommended some basic coursework for him to acquire the fundamentals and sent him on his way, expecting that he would find the course too challenging, and that I would not see him again.

Much to my surprise, Andres returned to me several months later, having matriculated at FIU as a nondegree seeking student, with a plan to take the preliminary coursework needed for him to be accepted into our new Master of Science in Data Science program. I was impressed by his drive and work ethic. Periodically over the next year he would check in with me to discuss ideas or get recommendations on which classes to take. His grades in all the basic subjects were stellar, all the more impressive since he had never had a technical education. He was also conducting research on campus with another research group (although he was unhappy with his tasks) and he also did a summer internship at Sandia National Laboratories When he was eventually accepted into the Master of Data Science program, starting in August of 2017, I decided to hire Andres as a graduate researcher in my lab. I brought him onto a project funded by the Office of Naval Research targeted at developing methods to automatically detect disinformation in long form text like news articles. Under my supervision, Andres has tackled the difficult task of Cross Document Event Coreference (CDEC), the first step in our conception of the disinformation detection problem. Andres has attacked the problem with vigor. His initial investigations resulted in a comprehensive literature review that not only covered computational concerns in the CDEC task, but also more nuanced and philosophical issues related to defining an "event" in linguistic terms. After situating himself in the literature, Andres went on to re-implement a state-of-the-art approach, improving the Within Document Event Coreference (WDEC) subtask by adding several important features. Importantly, Andres has been especially interested in comprehensively understanding the problem from a statistical perspective. We anticipate several publications this term.

Concurrently with his research, I have witnessed Andres' excellent performance in several domains. Within my lab, he has volunteered to mentor two senior undergraduate design teams in the conception and implementation of a web archiving and content extraction tool. I was able to appreciate Andres' background as a teacher in his ability to meet the students where they are and help them perform at their best. I also had the pleasure of having him in my graduate Natural Language Processing course, where I was able to directly assess his performance as a student. This is a demanding graduate course, consisting of a large number of readings, a major literature review, and a final project in addition to a midterm and a final. He produced a compelling project with consisted of classifying a politician's political party using transcripts of their speeches, achieving good performance and offering a nuanced assessment of his model. I have also had the opportunity to witness Andres' interactions with both his peers and high-ranking researchers and program



managers affiliated with the Office of Naval Research. He comes across as candid, bright, humble and respectable. He is well liked by his peers in the lab and has taken the initiative to organize projects with several of them.

In sum, Andres is a hardworking, creative, highly intelligent young researcher who shows great promise in the technical domain. I strongly recommend him to you, and you would do very well to have him in your organization. I recognize that this is a generic recommendation letter; therefore, if you have any questions specific to your needs or the type of work your organization performs, please do not hesitate to contact me to discuss them at +1 (305) 348-7988 or markaf@fiu.edu.

Sincerely Yours,

SPES SCIENTIA FACULTAS

Mark A. Finlayson, Ph.D. Assistant Professor

Short bio: Dr. Mark A. Finlayson is an Assistant Professor of Computer Science in the School of Computing and Information Sciences (SCIS) at Florida International University (FIU), an R1 public research university in Miami, Florida. His research intersects artificial intelligence, natural language processing, and cognitive science. He directs the FIU SCIS Cognac Laboratory whose members focus on advancing the science of narrative, including: understanding the relationship between cognition, narrative, and culture; developing new methods and techniques for investigating questions related to language and narrative; and endowing machines with the ability to understand and use narratives for a variety of applications. He received his Ph.D. from MIT in computer science in 2012 under the supervision of Professor Patrick H. Winston. He also holds the M.S. in Electrical Engineering from MIT (2001) and B.S. in Electrical Engineering from the University of Michigan, Ann Arbor (1998). Dr. Finlayson served as a research scientist at the MIT Computer Science and Artificial Intelligence Laboratory for 2½ years before coming to FIU. Within FIU, he received SCIS's Excellence in Service award in 2016, SCIS's Excellence in Teaching award in 2018, and FIU's Faculty Excellence in Research and Creative Activities in 2019, and was named an FIU Top Scholar award for Teaching in 2018. He received an NSF CAREER award in 2018, an IBM Faculty Award in 2019, and was also named Edison Fellow for Artificial Intelligence for the US Patent and Trademark Office in 2019. His work has been funded by the NSF, NIH, ONR, DARPA, DHS, and IBM.