

To whom it may concern,

I am glad to write this reference letter for Dr. Francesco Pace.

Francesco has been a Ph.D. student under my supervision for the past three years and a half. He joined my group and the Data Science department based on a strong recommendation from a colleague of mine, working at the Polytechnic School of Torino. I am glad I followed the advice from this Professor and accepted him as a student in my group.

Francesco worked on a difficult topic, merging abstract themes in the domain of scheduling algorithms, systems aspects related to the design and implementation of distributed, large-scale computer programs, and an original approaches involving non-trivial machine learning algorithms.

During his work, Francesco showed to be curious, always open to new challenges, while being serious in his approach to conceiving complex artifacts related to the cloud computing paradigm, and in particular aspects related to the management of resources of compute clusters. Francesco has proven to be very independent, capable of following his own leads on a particular subject, while at the same time being very open to collaborations. Indeed, during his Ph.D. program he collaborated with Prof. Carra, from the University of Verona, and with Dr. Milios, a Postdoctoral researcher in my group.

More to the point, Francesco worked on scheduling algorithms, and showed to be able to come up with original approaches to solve well established problems in computer science. Additionally, he was capable of formulating new fundamental problems, that improved the view the community has on the state of the art. To validate his ideas, Francesco had to build a computer simulation environment, capable of simulating compute clusters with hundreds or even thousands of machines: such simulator, was capable of ingesting public traces released by Google, representative of very large, operational computer clusters of one of the major company in the domain of Cloud computing and distributed systems. Additionally, Francesco's work didn't stop at the simulation level and, through the collaboration with a research engineer in my group, he conceived, implemented, deployed and managed a real-life system (zoe-analytics) that has become a de-facto standard at Eurecom, driving research and teaching activities in the whole research center. His work attracted the interest of several companies, which are using zoe-analytics in production.

Francesco also had the opportunity to closely collaborate with top companies, such as IBM: he has been praised for his technical competence, and solid background in computer science.

Francesco was a key member in my group thanks to his managing capabilities: he was my lead teaching assistant, working for two courses: one on cloud computing and distributed systems, the other on algorithmic machine learning. Francesco showed to possess the necessary skills to steer students' behavior, to stimulate their curiosity, to go beyond their own limits, and to perform at their best. This is also true when it comes to his interaction with his peer Ph.D. students: Francesco managed to push other students to surpass their limits, inducing a positive and friendly competitive environment.

Finally, Francesco possesses excellent presentation skills, that he showed both in academic and industrial environments. His presentations and talks are always clear, to the point, with a perfect timing: this was for example the case in his own Ph.D. defense, in front of a jury composed of internationally renowned experts.

To complement my assessment of Francesco's engineering skills, I would like to stress that he holds a great dose of communication abilities and soft skills in general. Francesco was a great team member, fostering communication among his peers and professors in the department, beyond work activities: he will be truly missed!

Finally, my personal opinion, based on my experience with him, is that Francesco represents an excellent candidate, and I believe he enjoys all the necessary qualities to succeed in his career.

I truly wish him the best of success in all his future professional endeavors.

A handwritten signature in black ink, appearing to read 'Pietro Michiardi', with a long horizontal stroke extending to the right.

Pietro Michiardi

June, 27th, 2018