

## Letter of recommendation - Internship

Mr. M.Sc. Pietro Melzi, born on December 6th, 1995 in Lecco (Italy), worked as an intern at our location in Berlin (Germany) from February 1st, 2023 to March 31st, 2023.

secunet is one of the leading German providers of sophisticated IT security. In close dialogue with our customers - national and international companies, authorities and organizations - we develop innovative products and highly secure IT security solutions. Secunet has been the IT security partner of the Federal Republic of Germany since 2004.

In the course of secunet's AntiBias project, Pietro Melzi was assigned the task of implementing a software to synthetically generate facial images. The software should allow to pass parameters related to demographic properties like gender, age and race, as well as environmental changes. This software should enable the generation of synthetic large-scale biometric databases for training and testing algorithm fairness. Based on a re-implementation of existing methods building upon Generative Adversarial Networks (GANs), the possibilities of training diffusion models to generate more realistic synthetic images should be investigated and summarized in a scientific publication.

Mr. Melzi has a wide range of specialist knowledge, which he uses successfully in practice at all times. Due to his extremely quick comprehension, he quickly familiarizes himself with new areas of responsibility, is versatile and has a complete overview of even the most difficult contexts. Mr. Melzi always shows a high level of initiative and always fully identifies with his tasks and our company. His enthusiasm for action deserves special mention. Even in situations with the greatest workload, he always proves to be extremely resilient. He carries out his tasks with the utmost care and a high sense of responsibility. He is extremely resilient, very conscientious and always works quickly without sacrificing precision. Mr. Melzi is extremely reliable. He always achieves outstanding work results, both in terms of quality and quantity. Mr. Melzi always fulfills the tasks assigned to him to our complete satisfaction.

Because of his always very friendly, sociable and balanced nature, he is highly valued and enjoys great popularity; he actively promotes good cooperation and a team atmosphere at all times. His behavior towards management, colleagues and employees is always exemplary in every respect.

We would like to thank Mr. Melzi for the always very good performance and wish him continued success and all the best for the future, both professionally and privately.

Essen, May 25, 2023

**secunet Security Networks AG**



i. V. Marco Breitenstein  
*Vice President Homeland Security*



i. V. Kevin Käbisch  
*Senior HR Business Partner*