



To whom it may concern:

I am pleased to write this Letter of Recommendation to support Vinicius Francisco da Silva in his application.

I am a Senior Research Software Engineer at Microsoft Research, where I work on the design and implementation of operating systems for datacenters and the cloud. I earned my PhD degree in Computer Science in a cotutelle regime from Université Grenoble Alpes (UGA) and Pontifícia Universidade Católica de Minas Gerais (PUC Minas). I was advised by Professor Jean-François Méhaut and Professor Henrique Freitas and in my thesis, I proposed [Nanvix](#) – a open-source distributed operating system for lightweight manycore processes. I received my MSc degree in Computer Science from Federal University of Santa Catarina (UFSC) for introducing a new workload-aware loop scheduling algorithm for irregular applications. I completed my BSc studies in Computer Science at PUC Minas with *Summa Cum Laude* honors and Featured Computer Science Student award by the Brazilian Computer Society (SBC).

Vinicius worked with me as an undergraduate intern in 2021 in Nanvix. More precisely, he implemented a Just-In-Time translation engine for the system's emulator that would translate assembly instructions from MIPS to RISC-V processor. During his internship, Vinicius demonstrated to be a fast and curious learner, as well as to have solid background on software development.

If you have any further questions concerning my recommendation, please do not hesitate to contact me. I would be pleased to help.

Sincerely,

A handwritten signature in black ink that reads "Pedro Henrique de Mello Morado Penna".

Pedro Henrique Penna, PhD
Senior Research Software Engineer
Microsoft Research – Systems Groups – Redmond, USA
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