

Dear Infleqtion Hiring Team,

I am excited to apply for the Quantum Software Engineer role focused on quantum error correction. Although I do not hold a PhD, I have contributed to QEC research by designing decoders, writing efficient simulators that account for hardware imperfections, and studying how various code implementations perform under realistic conditions. These experiences gave me a strong grasp of real-world challenges, from theoretical proposals to practical implementation.

My work has involved replicating threshold results from recent papers, validating QEC codes against different noise models, and refining protocols for quantum devices. During these efforts, I have applied QEC methods to multiple qubit platforms and verified that simulator outputs align with real-world measurements. I worked closely with engineers and physicists to ensure that each approach remains effective under practical constraints.

I am eager to bring this hands-on expertise to Infleqtion's QEC efforts, help expand the capabilities of neutral atom platforms, and push the boundaries of quantum computation. Thank you for your time, and I hope to hear back from you soon!

Yours faithfully,

Ivan Ogloblin