

Jesse Lu

Who am I? A problem solver.

Not every problem, not all problems, and not by myself; but at the heart of it, solving problems is what I do well, it's what I enjoy doing, and it's what I would like to do at Nvidia.

I want to join Nvidia Research as a Research Scientist and solve technically-challenging, world-changing problems.

A solver: technologist, innovator, and communicator.

Technologist: has a deep proficiency in a unique set of technical areas.

GPUs I have developed multiple electromagnetic simulation packages for the GPU, the latest being a multi-GPU, dynamically-compiled electromagnetic solver based on CUDA.

Physics I did my PhD in nanophotonics and have a deep expertise in electromagnetics, as well as a general proficiency in all things scientific.

Optimization During that PhD I developed an optimization paradigm for nanophotonic structures, and understood the power of convex optimization and related techniques.

Innovator: finds and combines the technical pieces needed to create something amazing.

Learns fast I intentionally expose myself to other disciplines in order to “connect the dots” in a powerful way, and I quickly incorporate their salient ideas into my own projects.

Fails fast When you innovate, you succeed only after many failures. I wittle down new features/methods into their simplest viable test cases in order to fail as fast as possible.

Communicator: disseminates the results of innovation and engages others in furthering innovation.

Public speaking Stand me up in front of a crowd, and I'll love it. One of my passions is to be able to bring others to that “Aha!” moment, especially concerning complex technical subjects.

Connecting Or put my in a room with a single person, and I'll love that too. I am always eager to learn and I've found that questioning and exploring someone else's knowledge and perspectives is often the best way to do so.

In conclusion, I believe that great companies are simply a collection of great problem-solvers tackling great problems and I hope to join Nvidia Research in doing so¹.

¹jesselu@stanford.edu, (408)568-9356, East Palo Alto, CA.