Stanford University

December 1, 2023

Dear members of the faculty selection committee,

I am writing to apply for your department's assistant professor position. I am pursuing computer science research as a postdoctoral scholar at Stanford University. My research experience is in fast algorithms, inverse problems, parallel computing, and programming models. To advance my profession, I intend to form a research group focusing on various aspects of parallel computing, programming models, and large-scale applications.

Since I graduated from University of Illinois in July 2022 with a PhD in electrical and computer engineering, I have been interested in high-performance communications as an extension of my dissertation on enabling the solution of large-scale computational problems using supercomputers.

My intention is forming further collaborations with the faculty across departments for exciting applications. An exciting existing collaboration is for solving large-scale 3D ptychography problems using supercomputers. I collaborate with X-ray imaging experts to understand summarizing and generalizing the operations in inverse problems so that we can develop language for developing complex inverse solvers and running them on the data to reconstruct 3D images very fast. Please find my research statement for details.

I believe your institution will be a good fit for writing interesting grant applications and working with students from different backgrounds for high-end research and teaching excellence. I think I find ways to funnel each student's interests into the general theme of my research. I am attaching the teaching and diversity statement for elaboration.

Another information that might interest you is that I will relocate with my spouse Rebecca Hodel and 5 mo daughter Maya. I would appreciate it if you could discuss employment opportunities for spouses.

Please do not hesitate to send your inquiries directly to me or one of my reference letter providers:
- Alex Aiken (Stanford), postdoctoral advisor.
- Wen-mei Hwu (Nvidia), doctoral advisor.
- William Gropp (Illinois), collaborator.
- Weng Cho Chew (Purdue), early doctoral co-advisor.

Yours sincerely,

Mert Hidayetoglu

https://merthidayetoglu.github.io/