National Renewable Energy Laboratory March 30, 2023
Concerning: Commercial Building Software Engineer

To whom it may concern,

I am currently a PhD Candidate in the University of Arizona's Applied Mathematics program, applying numerical methods to simulate gas flows across networks - with the eventual goal to create a high-fidelity coupled simulation/optimization framework for gas and energy grids. I am particularly interested in the interaction between the coupled dynamics and network topology as energy generation transitions from traditional, concentrated, deterministic sources to distributed, stochastic renewables.

Before entering graduate school, I worked for 3 years writing algorithms in an embedded environment using C/C++. This experience was invaluable, and taught me that I thrive at the interface between modeling of complicated dynamical systems and efficient implementations of algorithms to simulate them.

As I near the end of the PhD, I seek a full-time position to enrich my training via hands-on application, development and deployment of algorithms to problems at scale. In particular, I look to fuse my experiences as a software engineer and researcher to develop and deploy modeling and simulation algorithms in a team environment, with focus on reliability, maintainability, and performance.

NREL seems a natural fit for my skillset and curiosity. While I am currently unexperienced with the exact application area, I learn very quickly, and have a strong foundation upon which to grow.

I appreciate your consideration,

Criston Hyett

Attached: curriculum vitæ