

Dear Reader,

"Life is unpredictable, often presenting us with challenges or results we least expect, even if we have a plan for the present or future. The different possibilities and outcomes that we experience is a life worth living." Whether I am doing software or research, I find that having the ability to finish different projects is the most important experience that I have to bring to your company. I also know that collaborating with other colleagues is just as important and helps project efficiency. I see every new software or research project as a fun puzzle. I start from scratch, decide how I want to build or solve that puzzle, go through the checklist of the topics that I need to look into and add to the project, potentially run into a problem, check the error log or find references to a similar problem, analyze and fix the problem, then repeat until the project is complete.

I have the following contributions and achievements that is related to any software based job position I am applying for your company:

- I made multiple websites including blog posts, ecommerce stores, and storage or visualization of records on data tracking/analytics.
- I am highly reliable in checking python scripts where I sometimes help my co-workers out. All applications/files that I wrote and checked during my job at the Los Alamos National Lab was in Python 3.x.
- Also, when I worked at the Los Alamos National Lab, I helped reduce memory usage for storing particle trajectory data by outputting results in a binary(.bin or .npy) format rather than using a comma separated value(.csv) format. I also reduced simulation time for generating particle trajectory data by distributing the computational workload across two nodes in a cluster(LANL Turquoise network) rather than using just one, significantly reducing processing time.
- I am able to code C++ or Python firmware from an IDE into a microcontroller such as the Arduino Uno to use for my electric engineering projects.

I have the following contributions and achievements while I worked at the Los Alamos National Lab that is related to any research based job position I am applying for at your company:

- Co-authored in the published paper: *Determining the Dominant Acceleration Mechanism during Relativistic Magnetic Reconnection in Large-scale Systems*.
- Simulated, sorted, and presented particle trajectory data in the Los Alamos National Lab(LANL) turquoise network. I had access to the wolf(wf-fe) and grizzly(gr-fe) nodes. LANL uses Slurm as the workload manager. I am also skilled in using linux as I use it for running and navigating applications/files.
- Contributed in group discussions about recent findings from myself or from others, physics fundamentals, references from other research papers, and clarification questions.
- Made presentations on my recent findings on initial shock conditions, MHD particle trajectory data, and solar flare bursts in lightning talks.
- I also have physics research based projects that I would talk with my professor and peers on when I studied at UCSC.

If I am one of the candidates that you decide on, I would like to learn more about the projects that I will contribute on and anything else that would help me quickly adapt into the workplace. I would also like to learn more about my potential colleagues and their backgrounds. I hope we get to talk more together!

Best,

Dylan Ma

me@dylanma.com

505-695-3475