

# Research Engineer Cover Letter

6363 Langworth Drive South Makeda, AR 23314-3951

**Dear Shiloh Tillman,**

I would like to submit my application for the research engineer opening. Please accept this letter and the attached resume.

Previously, I was responsible for solution architectures and analysis in support of various Advanced Engineering and Software Development projects to include, but not limited to: hypervisor host security, linux based application security, standard linux gold image design, and security monitoring for Private, public and/or hybrid cloud architectures.

Please consider my qualifications and experience:

- Expertise in Matlab and C++ programming
- Solid understanding on advanced device architectures (FinFET, GAA-FET, Tunnel FET), Si, Ge, III-V materials and their device physics
- In-depth knowledge and hands-on experience in electrical characterization of Si MOSFETs such as FinFET, Nanowires and Vertical Transistors
- In-depth knowledge of semiconductor processing integration flows
- TCAD modeling experience using Synopsis/ Silvaco/ GSS TCAD or other atomistic simulations tools
- Modify device compact models to capture new device physics and build new analytical and behavioral models to capture device IV and CV trends
- Working knowledge of PEX tools, SPICE simulators, programming and scripting skills in MATLAB, Perl, Python, Tcl/kl are preferable
- First principles-based chemical process modeling experience (whole-process or detailed unit operation)

**Thank you for considering me to become a member of your team.**

Sincerely,

Cameron Thompson