Chinmay Rozekar

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Objective

Dynamic engineer with a versatile skill set in Silicon Validation, eager to contribute to both Pre-Silicon and Post-Silicon phases in innovative tech environments.

Professional Summary

- Versatile engineer with 4+ years in Post Silicon Validation, adept in both Pre-Silicon and Post-Silicon environments, specializing in system-level testing and product quality enhancement.
- Committed to leveraging technical expertise for reducing operational costs and enhancing product specifications.
- Excels in cross-functional team collaboration, test automation with Python, C/C++, and Java, and innovative problem-solving.

Experience

Product Development Engineer July 2020 – Present

Advanced Micro Devices (AMD) *Austin, TX*

Post Silicon Validation/ System Level Testing (SLT)

- Led system-level testing for AMD's Ryzen 8040 'Hawkpoint' series, Accelerated Processing Units (APUs), ensuring adherence to customer environment standards.
- Spearheaded Test Time Reduction (TTR), eliminated redundant tests, for reducing operational costs through DPPM Yield Analysis in Production.
- Experienced in monitoring production yield and debugging/root cause analysis of high-Pareto items in production fallout.
- Experienced in performing SoC Characterization for Product Definition by setting Test-Program flows on volume testing.
- Maintained the test program codebase repository using Atlassian BitBucket, overseeing the development and release of test content throughout the product roadmap.
- Collaborated with Diagnostic, BIOS, and Design teams to enhance CPU performance features, contributing to product specification improvements.
- Experienced in Customer RMA Debug issues through secure fuse unlocking during Field Return Analysis (FRA).
- Established and managed an in-house server farm and APU client board setup, ensuring robust testing environments and streamlining development.

Product Engineering Co-Op Jan. 2019 – Dec.2019

Advanced Micro Devices (AMD) *Austin, TX*

- Designed and automated test programs for Human Body Model Testing, reducing Engineering time by 90%.
- Reverse-engineered and redesigned a 20-year-old robotic graphical user interface in Python, reducing engineering time by 95%.
- Conducted stress tests on AMD products according to industry standards, qualifying products for production.
- Performed scheduled calibration and waveform verification for preventive maintenance as per ISO 9000 standards
- Conducted Design of Experiments on AMD products for Capacitive Modeling to optimize protection circuitry

Graduate Research Assistant Jan 2020 – May 2020

Rochester Institute of technology *Rochester, NY*

- Developed a process flow for thin film IC development, covering various fabrication steps
- Designed and simulated NMOS devices to determine sub-threshold voltages and model leakage current
- Conducted electrical device characterization to optimize gate oxide thickness on NMOS devices.

Technical Skills

Languages: Java, Python, BASH, C/C++, SQL, HTML/CSS, XML, Markdown, MATLAB, Perl
Libraries: Matplotlib, Pandas, Numpy, Scikit-learn, Selenium
Developer Tools: Git, Jira, Confluence, Linux, CI/CD, IntelliJ Idea, VS Code, PyCharm, Eclipse, Jupyter, Anaconda, JSON, Notepad++, LaTeX
Protocols: JTAG, PCIE, DFT, Boundry SCAN, ATPG
Simulation: KiCAD, SolidWorks, COMSOL Multiphysics, Silvaco-Athena, Pyxis(Mentor Graphics)
Data Analysis: Excel, Power-BI, JMP, Python

Projects

Review of Thin Film Technologies for Flexible Electronics Jan 2020 – May. 2020

- Designed a simulation model for growing a 1 µm layer of flexible crystalline Si substrate on top of Tungsten metal layer using SOI method in Silvaco Athena.

A Thermally actuated four-legged MEMS based Silicon Micro-robot May 2018 – Dec. 2018

- Designed and fabricated a thermally actuated MEMS based Silicon micro-robot. Modeled design in CAD / Solidworks and Heat Transfer using COMSOL multi-physics FEA.

Education

Rochester Institute of Technology Rochester, NY
Master of Science, Electrical Engineering *Aug. 2017 – May 2020*

Bharati Vidyapeeth University Pune, India
Bachelor of Technology, Electrical Engineering *Aug. 2012 – June 2016*