

2020 Job Opportunities at TSMC

Location: San Jose, CA (USA)

Job Description:

TSMC seeks full-time etch modeling research scientist/developer with experience in plasma and feature profile theory and simulation. If hired, he/she will gain exciting real-world etching experience at the largest foundry company. We frequently work with engineering and process teams in Taiwan to solve real-world problems of high value, explore new ideas, and learn from one another. The ideal candidate should be a die-hard optimist with a can-do spirit and hands-on attitude.

Responsibilities:

- Understand and run existing code to compare with real data.
- Calibrate the model with big data
- Accelerate the existing model with GPU
- Develop physics-machine learning hybrid model to meet industrial standards
- Investigate the etching process using physics model

Requirements

- PhD or Master degree in Electrical Engineering, Physics, Applied Mathematics, Computer Science or other technical fields from a creditable university.
- Excellent analytical and mathematics skills
- Excellent programming skills in Fortran, C/C++, Python. Experience with GPU a plus.
- Ability to work independently and in teams

Benefits

- Practical experience in developing industrial-level simulation tools
- Collaborating with world best skilled process teams
- Opportunity to participate in networking events and company meetings
- Excellent compensation and medical cover

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About TSMC:

TSMC pioneered the pure-play foundry business model when it was founded in 1987, and has been the world's largest dedicated semiconductor foundry ever since. The company supports a thriving ecosystem of global customers and partners with the industry's leading process technology and portfolio of design enablement solutions to unleash innovation for the global semiconductor industry. TSMC serves its customers with global capacity of about 13 million 12-inch equivalent wafers per year in 2020, and provides the broadest range of technologies from 2 micron all the way to foundry's most advanced processes, which is 7-nanometer today. TSMC is the first foundry to provide 7-nanometer production capabilities and the first to commercialize Extreme Ultraviolet (EUV) lithography technology in delivering customer products to market in high volume. TSMC is headquartered in Hsinchu, Taiwan.