

Position Title: Applications Engineer-DFI Products

Position Location: Milpitas, CA

Easy Apply: bit.ly/CAAppsEng

PDF Solutions (NASDAQ: PDFS) offers an end-to-end analytics platform that empowers engineers and data scientists across the semiconductor ecosystem to rapidly improve the yield, quality, and profitability of their products. By combining industry-leading data analytics and professional services with exclusive, differentiated product data generated during the manufacturing process, PDF Solutions is delivering on the promise of Industry 4.0 today by transforming how the ecosystem collects, analyzes, and shares data. Key Fortune 500 organizations around the world rely on PDF Solutions to remove the data barriers that encumber and constrain new product introductions and to deliver the machine learning insights that drive efficient and profitable high-volume manufacturing.

Headquartered in Santa Clara, California, PDF Solutions also operates worldwide in Canada, China, France, Germany, Italy, Japan, Korea, and Taiwan.

Position Summary: PDF is seeking an experienced Applications Engineer to join the field team to work on PDF's ebeam inspection tool for Design-For-Inspection used for enhancing yield in state-of-art 300mm semiconductor fabs. The Applications Engineer must be an organized and highly motivated team player with strong initiative and communication skills and possesses the drive to deliver quality results on time in a dynamic, multi-discipline, intensive and highly productive small team environment.

Key Responsibilities

- Work in 300mm fab and write inspection recipes on PDF's ebeam tools.
- Drive wafer inspection, analysis, and review of devices to reduce yield loss on some of the world's most advanced ICs.
- Oversee the data pipeline from measurement to extraction to analysis. Study IC layout files and write inspection recipes.
- Monitor data quality and health of tool.
- Perform research and development of voltage contrast inspection using design of experiments.
- Collaborate with PDF Engineering teams to understand and analyze tool data.
- Perform R&D and experiments for improving and optimizing recipes based on data analysis
- Enhance the understanding of voltage contrast techniques and fundamentals.
- Lead complex engineering projects
- Drive continuous business process improvement and automation

- Other projects and duties as assigned

Job Requirements

- Master's degree or higher in Electrical Engineering, Applied Physics, Materials Science or similar engineering field
- Solid analytical and engineering skills
- 3+ years' experience in IC manufacturing
- Statistics and data analysis (NumPy, JMP, Tableau, MATLAB, etc.)
- Successful customer facing experience required.
- Experience in ongoing system, data and process improvements
- Ability to work effectively and partner with various departments and teams.
- Ability to manage multiple priorities, work under time constraints and deadlines
- Excellent interpersonal, communication, collaboration and influencing skills
- Ability to respond to, prioritize effectively and meet deadlines while maintaining the highest of standards for completeness and accuracy.
- Ability to effectively operate in a fast-paced team environment with ability to adapt to change.

Following Requirements are Highly Preferred

- Python or other programming experience (Java, C#, C++, Ruby, Perl, etc.)
- Circuit modelling software (SPICE, etc.). Circuit design and validation tools (Cadence, Synopsys)
- Sub-22nm semiconductor fabrication (FINFET, Double Patterning)
- Vacuum tool ownership and maintenance. Vacuum systems and pumps, electron beam columns, wafer handling robots, and/or motion control