

**Position Title:** Sr Systems Engineer

**Position Location:** Milpitas, California

PDF Solutions, Inc. (NASDAQ: PDFS) is a leading provider of yield improvement technologies, services, systems and analytics for the IC manufacturing process life cycle. Headquartered in San Jose, Calif., PDF Solutions operates worldwide with additional offices in China, Europe, Japan, Korea and Taiwan.

**Position Summary:** PDF is seeking a Senior Systems engineer to join the R&D team focusing on gathering differentiated data using a novel electron beam inspection (EBI) system. These cutting-edge EBI tools are basically high-speed Scanning Electron microscopes (SEM) used at 300mm semiconductor wafer fabs to implement PDF's Design-for-Inspection (DFI) methodology used in yield ramp and manufacturing control.

The systems engineer will work closely with the PDF internal engineering team and with our customers on a wide range of technical challenges to improve system performance and throughput of our EBI machine. Must be organized, highly motivated, a team player, with strong initiative, good communication skills, and the ability to work timely in a dynamic, multi-disciplinary, intensive and highly productive small team. environment.

#### **Job Duties:**

- Develop methods, characterize, and improve system noise, system performance, and system serviceability in electron beam inspection hardware with focus on light optics and low-noise electronics.
- Conduct necessary tests on the bench and in lab setting
- Write prototype SW utilities to collect, visualize, and analyze measurement data.
- Communicate results effectively with engineering team.
- Work with HW, SW, and field engineering teams to implement engineering improvements

#### **Qualifications and Skills**

- Degree in Electrical Engineering, Physics, or an equivalent engineering field
- MS with 3+ years' industrial experience or Ph.D.
- Theoretical understanding and experimental experience in light optics. Simulation background in light optics (e.g Zemax) is a plus.
- Ability to understand, debug, and solve electromagnetic interference issues (e.g. conducted/radiation emission, electrostatic discharge).
- Hands-on experience in data collection and characterization for light optics, low-noise electronics, and bench electrical equipment
- Experience in data analysis using any visualization tool (JMP, Spotfire, Matlab, etc.)
- Ability to work across functional teams, present data clearly, and communicate effectively
- Plus : Background in electron microscopy (SEM or TEM)
- Plus : Experience with programming in LabVIEW and/or Python
- Plus : Background in advanced semiconductor manufacturing or manufacturing tools