Position Title:	Senior Mechatronics Engineer
Location:	Milpitas, California
Company:	KLA
Job Type:	Full-Time, Regular

Apply here: https://careers.kla-tencor.com/jobs/4770373-senior-mechatronics-engineer

Company Overview

Calling the adventurers ready to join a company that's pushing the limits of nanotechnology to keep the digital revolution rolling. At KLA, we're making technology advancements that are bigger—and tinier—than the world has ever seen.

Who are we? We research, develop, and manufacture the world's most advanced inspection and measurement equipment for the semiconductor and nanoelectronics industries. We enable the digital age by pushing the boundaries of technology, creating tools capable of finding defects smaller than a wavelength of visible light. We create smarter processes so that technology leaders can manufacture high-performance chips—the kind in that phone in your pocket, the tablet on your desk and nearly every electronic device you own—faster and better. We're passionate about creating solutions that drive progress and help people do what wouldn't be possible without us. The future is calling. Will you answer?

Group / Division

With over 40 years of semiconductor process control experience, chipmakers around the globe rely on KLA to ensure that their fabs ramp next-generation devices to volume production quickly and cost-effectively. Enabling the movement towards advanced chip design, KLA's Global Products Group (GPG), which is responsible for creating all of KLA's metrology and inspection products, is looking for the best and the brightest research scientist, software engineers, application development engineers, and senior product technology process engineers.

The Film and Scatterometry Technology (FaST) Division provides industry leading metrology solutions for worldwide semiconductor IC manufacturers. The FaST Division portfolio of metrology products includes hardware and software solutions for optical film thickness, optical critical dimension (CD), composition, and resistivity measurement systems. These products are essential for the IC manufacturers as they provide critical metrology capabilities for the development and implementation of their advanced IC processes. The FaST division is committed to support our customers to achieve performance entitlement of our solution and we effectively partner with our customers from their early research and development phase to the high volume in-line manufacturing implementation specific for their process needs. The division consists of a global team located in US, Israel, China, and India.

Responsibilities

Work with program and functional managers to develop next generation metrology systems. Assist program manager, with inputs to the program schedules, and material cost. Collaborate with mechanical, electrical and software groups to create state of the art metrology equipment.

As a Mechatronics Engineer on our team, you will be working on the development of major subassemblies for our next generation wafer inspection tools. You will be responsible for component level specifications, requirements specification, dynamic system modeling, performance estimation and data analysis. You will be working closely with mechanical and electrical engineers. This position requires good interpersonal skills to provide clear feedback to other engineers working on projects.

Creative approach to problem solving is indispensable. Work with a team of engineers to produce design concepts and apply first principles to determine feasibility. Use multidisciplinary approach to system debugging.

Qualifications

- Master's degree with 5+ years in Mechanical/Electrical Engineering with some semiconductor equipment experience.
- Solid understanding of dynamic systems modeling and feedback control. Good understanding of filter design and their effects on control systems.
- Component section, controller, amplifier, actuators and sensors for precision mechatronics to achieve sub-micron motion.
- Basic knowledge of analog and digital electronics signal processing and power electronics
- Experience with Python and C, languages
- Good knowledge of Matlab/Simulink system modeling and data analysis.
- *** Excellent communications skill is required for this position, written and verbal. ***
- Skilled at debugging motion control systems

Minimum Qualifications

- Master's Level Degree with at least 5 years of experience in Mechanical or Electrical Engineering, with some semiconductor equipment experience.

KLA is an Equal Opportunity Employer. Applicants will be considered for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, disability, or any other characteristics protected by applicable law.

Relocation Available: Possible

Remote/Virtual Location: no