

COMPANY

Tunoptix is a fast-growing startup focused on revolutionizing the way optical systems are conceptualized, designed, and manufactured using nanotechnology and semiconductor processing. We combine semiconductor-defined meta-optics with advanced, AI-based image processing and proprietary design techniques to enable next-generation cameras. Tunoptix products will expand possibilities in the fields of machine vision, consumer electronics, medical endoscopy, 3D imaging, and hyperspectral imaging.

Tunoptix is an emerging leader in meta-optics and computational imaging and was founded to commercialize disruptive meta-optical technologies developed in the research groups of professors Arka Majumdar and Karl Bohringer at the University of Washington. We have raised venture funding from IP Group as well as from major government funding organizations including DARPA and NASA. Tunoptix is also a member of the vibrant startup community at the University of Washington CoMotion Fluke Labs incubator.

Tunoptix Website

POSITION – Process Engineer

Reporting to the Director of System Design, the Process Engineer will collaborate with a talented team of engineers and scientists to develop and prototype cutting-edge optical systems. Specifically, this includes both developing nanofabrication processes to prototype high-quality metasurface components, as well as designing and building opto-mechanical packaging solutions for Tunoptix camera systems. This is an exciting opportunity for a highly motivated and capable engineer to gain expertise in the growing field of meta-optics, and computational imaging systems. Together, we can shape next-generation imaging systems for industrial machine vision, medical instrumentation, automobiles, robotics, and consumer electronics.

LOCATION: Seattle, WA

RESPONSIBILITIES

- Work closely with the Company's founders and technical team to take ownership of and lead the company's meta-optics nanofabrication process development and prototyping capability
- Optimize key nanofabrication process steps to meet performance criteria
- Maintain detailed documentation and metrology data for cleanroom processes
- Perform nanofabrication of devices for internal and external testing
- Manage the relationship with Tunoptix partner vendors involved in dicing, mounting, and machining/printing of opto-mechanical prototypes
- Assist in the development, production, and testing of opto-mechanical packaging designs.
- Support in the optical testing and characterization of the prototyped imaging systems

QUALIFICATIONS

 Minimum of a Bachelor's in an engineering field or equivalent technical discipline (MS or PhD preferred)



- 4 years of experience in a multi-user cleanroom facility. Current experience and equipment qualification at the Washington Nanofabrication Facility are highly desirable
- Experience with lithography systems (e-beam experience strongly preferred), dry etch process optimization/troubleshooting, thin film deposition, metrology (SEM, thin film measurement)
- Experience with wafer dicing, opto-mechanical packaging, and tolerancing
- Fluency in the use of CAD design packages (e.g., SolidWorks or AutoCAD) and experience with machine shop and 3D printing technologies are highly desirable
- Strong interpersonal and technical communication skills
- Familiarity with ray optics, imaging systems, and optical simulation (e.g., Zemax) are a strong plus
- Ability to bridge technology development with commercial demands
- Familiar with the startup or early-stage business environment
- Entrepreneurial spirit, with a hands-on, roll-up-the-sleeves mentality

WHAT WE OFFER

This role is a temp-to-permanent opportunity that will include the following once a full-time offer of employment is made:

- Competitive Compensation Package, including equity
- Full benefit package: Medical, Dental, and Vision Plans
- Insurance: Company paid life insurance, Acci
- Medical savings accounts: FSA and HSA accounts
- Paid time off: Vacation and sick time

COVID-19 PRECAUTIONS

- Remote interview process
- Personal protective equipment required
- Social distancing guidelines in place
- Virtual meetings

EEO Statement

Tunoptix is proud to be an Equal Employment Opportunity and Affirmative Action employer. We do not discriminate based upon race, religion, color, national origin, gender (including pregnancy, childbirth, or related medical conditions), sexual orientation, gender identity, gender expression, age, status as a protected veteran, status as an individual with a disability, or other applicable legally protected characteristics.

APPLY

If you are interested in the role, please send your resume to John.Fijol@ipgroup-inc.com