Position Summary for Principal Optical Engineer

The candidate must be an energetic, self-starter to perform a full spectrum of optical systems engineering on state of the art near-eye imaging hardware. Experience in waveguided optical systems, projection systems, diffractive elements, holography, optical design, both imaging and illumination, metrology, manufacturing, QC, and project management are all desired skills. The individual must demonstrate effective interaction with a multidisciplinary team and deliver custom designs and solutions for a variety of eyewear needs. Candidate should have unique talents and experience to further Vuzix near-eye display system designs.

Duties and Responsibilities

- Conceptualize and implement the architecture of high technology products within a concurrent engineering environment.
- Design compact, high efficiency projection systems that meet specific performance criteria.
- Perform full modeling and tolerance analysis of imaging and illumination systems.
- Evaluate designs for cost, manufacturability and reliability.
- Oversee manufacture, assembly, and alignment of complex optical systems.
- Characterize and test bare microdisplays, projector systems, and complete near-eye systems.
- Experience with geometric optics, LED illuminators, backlights, conventional microdisplays, collimators and concentrators, holographic systems, optical interference coatings, injection molding, lens design, and high precision optics design, fabrication and assembly.
- Research and understand human factors and implement intelligent design choices for head mounted display systems.
- Generate complete system documentation and provides input to technical proposals in order to effectively communicate the design and/or approach to internal and external customers.
- Validate system performance in order to prove the technical design through analysis, simulation, and laboratory testing.
- Provide senior optical engineering expertise. Responsible for achievement of schedule, financial and technical performance objectives.
- Ensure proper procedures and methods are used by other members of the design team by providing a value added quality review.
- Independently develop and implement corrective action to product and procedural problems.
- Communicate with the customer suppliers, and internal management as the technical expert on projects in order to effectively interface with all facets of decision making personnel and customer management.
- Provide budget, schedule, and technical compliance updates to management in order to effectively record progress of technical aspects of the program assigned.
- Ensure successful transition of products/projects to full scale production.
Experience Required

- Master’s degree in Optical Engineering, Physics or equivalent.
- Minimum of 5 years of detailed experience working in a product design environment.
- Strong organizational, time management, and leadership skills; and the ability to successfully manage multiple tasks in a dynamic environment.
- Familiarity with sequential and non-sequential programs like Zemax, Code V, etc.
- Familiarity with optical measurement techniques.
- Must be able to demonstrate out-of-box thinking for unique problems and develop concepts into products.
- Strong interpersonal and communication skills with the ability to solve problems, multi-task and be a hands-on leader.
- Ability and willingness to travel, including internationally, if required.

Vuzix Corporation is an equal opportunity employer. We consider applicants without regard to race, color, religion, creed, gender, national origin, age, disability, marital or veteran status, or any other legally protected status. We are committed to recruiting and employing the best talent available in the display technology areas.