

## **Job Description: Embedded Systems Engineer**

### **Summary:**

ATOMICS is an early-stage startup that spun out of Brown University, and we are developing small molecule data storage systems to solve the world's pressing data storage and computing challenges. Our core technology provides solutions for secure physical object labeling and counterfeit detection in addition to data storage and molecular computing, making our technology dual-use with applications spanning government and commercial sectors. The nature of our technology is highly interdisciplinary, and we are excited to welcome you, an embedded systems engineer, to the team to work on many important, interesting, and challenging engineering projects and develop revolutionary technologies for the future!

### **Responsibilities as an engineer:**

- Design, implement, and optimize software/firmware that enables encoding and decoding information in a chemical system for embedded electrical and/or mechanical systems that write and read molecular data
- Identify and resolve software/firmware-related hardware issues through debugging and testing processes
- Willing to work on several projects at the same time
- Effectively communicate with other team members and contractors to meet technology development milestones
- Not afraid of new technological challenges and loves to learn new things!

### **What we expect from you (and what you can expect from us) as a team member:**

- We believe in our core that diversity and inclusion drive innovation, so bring your authentic self to work every single day and have an intrinsic motivation to make the work culture an inclusive and awesome place for all
- Be nice! We love smart and hardworking people, but not at the expense of being a kind human.
- Always look for growth opportunities, brainstorm with the team, propose new ideas, and support others to grow with you
- Be a great team member who collaborates with and helps those around them
- Be a great problem solver who is motivated to work on small or large challenges
- Be able to wear many hats and willing to go the extra mile to get the job done
- Have a positive and team-oriented attitude
- Take initiative and personal responsibility
- Enjoys and can work in a fast-paced startup environment

### **Benefits of working with us:**

- We are a small and diverse team, and this allows you to be an integral part of building a great work culture and technology that will change the world, all while having a deep sense of belonging on our team.
- You will have impact and ownership over the technology development roadmap, which is incredibly fulfilling!
- You will be expected to wear many hats that will challenge you, but you will always have a loyal support system and will grow in unimaginable ways while at ATOMICS.

- You will learn new skills and be exposed to many aspects of the startup - we welcome you to learn other aspects for your own personal and professional growth and development

#### **Required Qualifications:**

- Minimum of a bachelor's degree in engineering or computer science with at least 2 years of industry experience
- Experience with embedded systems and embedded microprocessors
- Strong programming experience in Matlab, Python, or C-family languages and demonstrated proficiency in some of these languages for embedded systems, including development of algorithms, manipulation of complex data structures, and implementing highly optimized code
- Experience with the FPGA design process and languages such as Verilog or VHDL
- Experience with lab instrumentation such as oscilloscopes, logic/protocol analyzers for debugging embedded systems
- Experience with full software lifecycle: specification, design, implementation, integration, debug and maintenance required.
- Good oral and written skills for communication and documentation of technical information.
- Ability to work as part of a team - you're collaborative, building relationships, humbly offering support and openly welcoming new approaches
- Exceptional analytical and problem-solving skills
- Self-motivated and passionate about your work
- Always eager to learn and improve - innovative and creative, you proactively explore new ideas and adapt quickly to change
- Ability to work in the US
- Be able to relocate

#### **Preferred Qualifications**

- Master's or a PhD in engineering or related field
- Mechanical design experience
- Experience in image analysis, computer vision, signal processing, and/or machine learning
- Experience in mathematics and scientific algorithm implementation and optimization
- An educational background that includes digital communications, image processing, and/or signal processing. Relevant subjects include error correction, file storage systems, channel coding, and digital image analysis.

#### **Compensation Package**

- Competitive salary plus stock options, commensurate with education and experience
- Floating holidays
- Flexible scheduling
- Health insurance stipend
- Training and development opportunities

If you are interested in this posting please email your resume with the subject line "**Embedded Systems Engineer Job Posting**" to [admin@atomicdata.com](mailto:admin@atomicdata.com).