
Senior Software Engineer – Architect and Real Time Machine Controls

Location: Copenhagen, Denmark.

Full-time on-site position (no remote work)

Travel: Expected <20% of work time

Reports to: Head of Software Development

Starting date: ASAP

Would you like to help us revolutionise the development and manufacturing of electronic, photonics, and optics industries? Welcome to ATLANT 3D – we invite you for an amazing journey where you will be a part of a team working towards disrupting 60 years of micro and nanofabrication technologies and systems. We offer you a once-in-a-lifetime experience. What we develop is unique, and we are incredibly excited to make a difference.

We are looking for a Senior Software Engineer to design and implement the Architecture for real time controls of ATLANT 3D's line of products for advanced manufacturing of electronic and optic devices. The ideal candidate must have strong Machine Automation and Real Time Controls experience to deliver software solutions ranging from real time controls, software architecture to meet customer security and IP protection, interface to manufacturing factory standards as used in the semiconductor manufacturing, and implementation of off-the-shelve solutions.

You will join a highly skilled and dedicated team of engineers and scientists and become a key participant in developing innovative solutions within nanotechnology. Cross-functional collaboration is the key to our success. We believe in combining theory and simulation with hands-on prototyping and testing.

What is the job about

We are looking for a Senior Software Engineer to design and implement the Architecture for real time controls of ATLANT 3D's line of products for advanced manufacturing of electronic and optic devices. The ideal candidate must have strong Machine Automation and Real Time Controls experience to deliver software solutions ranging from real time controls, software architecture to meet customer security and IP protection, interface to manufacturing factory standards as used in the semiconductor manufacturing, and implementation of off-the-shelve solutions.

The Software Engineer needs to have relevant prior experience in the development of software solutions for complex multidisciplinary system such as the ones in the semiconductor manufacturing equipment, architect a modern, scalable software infrastructure that will support the company's product portfolio rapid growth. The Software Engineer reports to the Head of Software Development, which is a part of Product Engineering Team. The team creates and executes on comprehensive project plans for the product commercialization tasks and is responsible for delivering projects on time and in budget.



What will be your responsibilities?

Your overall responsibilities:

- Developing and implementing the architecture and coding of software components and development platforms for ATLANT 3D's family of manufacturing systems
- As part of the architecture identify software elements that are implemented at the main system computer, and the ones as embedded software at module controllers as required to meet performance
- Keeping up to date with available off-the-shelf solutions and implement them to further enhance the company capabilities
- Keeping up to date with the latest developments and innovations in software solutions relevant to the company's technology, products, and market needs
- Identify and use off-the-shelf software solutions that meet the needs of the products both from the engineering point of view as well as the product features defined by product management
- Balance resource between in house and outsourced ones to meet company operational and product targets
- Meeting all industry relevant standards and requirements for developed software as used from example in the semiconductor manufacturing equipment
- Ensuring all developed software adheres to quality standards with adequate documentation
- Coordinating with other software development team members and the system electronics team to ensure system level requirements that meet the product needs as defined by product management
- Participate in product and software reviews to identify software driven solutions
- Timely solutions to software issues/bugs identified prior to, during, and post product introduction to the market.

We are looking for you with following professional competencies:

- Advanced degree in Computer Science, Machine Control Engineering, or related field with minimum 8 years relevant industrial experience
- Proven experience software development in complex multidisciplinary fabrication systems inclusive of real time machine control for micro positioning, thermal management, material transfer and flows, multi-sensor input and corresponding actions, user interface, etc. as for example used in the semiconductor manufacturing equipment industry
- Knowledge of software industry standards and preferred solutions for electronics and semiconductor industry
- Familiarity with databases is a must
- Familiarity in machine learning and artificial intelligence is a benefit
- Hands-on programming and debugging, software code
- Experience with C++, Java, Python programming languages
- Results-oriented with the ability to plan and manage complex projects, and deliver on deadlines
- Extensive experience in developing, deploying, and integrating software solutions
- Excellent problem solving, analytical and communication skills



- Experience working in time-critical projects with internal and external stakeholders
- Proficiency in Microsoft Office is a must
- Proficiency in English, both verbal and written is a must
- Proficiency in documenting processes and keeping up with industry trends

We are looking for you who:

- You Has excellent interpersonal and communication skills with a passion for technical leadership and innovation
- Are self-motivated proactive in collecting inputs and addressing issues timely
- Has well developed judgment and decision-making skills
- Has the ability to work with other team members as well independently to produce results
- Are result-driven and can make optimal use of available resources to produce R&D results
- Has an open-minded mindset and is a creative as well as critical thinker

We offer you:

- The opportunity to become part of a company poised to revolutionize the development and manufacturing of the electronic, photonics, and optics industry.
- An opportunity to have influence and make a significant contribution to a young and fast-growing company.
- International team collaboration and a great place to work where we like to be together.
- Opportunities and support to advance your personal and career.
- Working with state-of-the-art, most advanced technologies and highly innovative customer projects.
- Interactions with international partners, suppliers, customers, and associated travel.

You will be a part of a team working towards disrupting 60 years of micro and nanofabrication technologies and systems: **A once-in-a-lifetime experience.** What we develop is unique, and we are incredibly excited to make a difference. You can join us to take a technological leap together. **Growth opportunity.** We are a fast-growing team with a need for experts, with ambitions to grow and flourish. **Learning and development.** We are working in a cross-disciplinary field. Become a pioneer with us in developing new knowledge and technologies. **Work and Life balance.** We value the balance between work and play and are fans of Danish Hygge and the Bavarian style. **Life in Denmark.** Denmark is recognized as one of the happiest countries in the world with a family-friendly and safe environment, easy commuting, a high level of life, free healthcare, and access to any part of Europe or the World.



How do you apply for the job?

To apply, submit your information through the online form here: [LINK HERE](#)

In the application process you will be asked to attach a single PDF application file that should include:

- Motivation/cover letter in an overview form with 10 bullet points about you and a short paragraph on why you want to join the team
- Curriculum vitae
- Diplomas

We will review and invite for interviews ongoing in the process. We look forward to receiving your star application. If you would like to know more about the position, please contact **Head of People & Culture, Susie Sandberg** per [email](#) or mobile +45 4290 9097.

Who is ATLANT 3D Nanosystems?

ATLANT 3D Nanosystems is a Danish deep-tech company founded in 2018 with a mission to revolutionize electronics manufacturing atom by atom. The company is developing a fundamentally different and innovative platform technology that enables atomically precise manufacturing of advanced materials and structures for electronics, optics, and photonics industry.

In ATLANT 3D we are a highly dynamic, international, and multidisciplinary team of experienced professionals. The ATLANT 3D team culture is a significant asset that drives radical innovation and rapid movement and creates differentiating benefits like a bold vision, concrete technology, and commercial value.

ATLANT 3D closed a substantial Series A investment round in August 2022 which is the largest Series A round in Denmark outside of the life sciences and software field. The funding will accelerate ATLANT 3D growth including expanding the engineering and commercial teams, further develop the technology platform, and expanding ATLANT 3D business to the international markets.

