

Control Engineer, Eye-Tracking Solutions

Location: Brussels, Belgium (Flexible/Hybrid Work Model)

About VoxelSensors

VoxelSensors is a pioneering startup at the forefront of Intelligent Perception. Our mission is to enable Physical AI by using our proprietary SPAES™ sensor technology and PERCEPT data platform to capture, curate, and deliver actionable, human-point-of-view datasets for enabling AI agents and training AI models. An essential sensing modality is our high-performance eye-tracking solution.

Your Role

We are looking for a talented and motivated Control Engineer to work on a dynamic system with a human in the loop; develop the dynamic control algorithms and obtain stable system operation in a wide range of environments. You will be a key individual contributor, with a clear growth path to becoming an eye-tracking system-level expert.

Your core focus will be to contribute to the system architecture and component selection, define component and device interfaces and develop the control loops for stable and low-latency operation. You will drive the validation and verification of the developed system control.

Your activity

- Design and development of all levels of control, real-time circuits and systems, digital closed-loop implementations.
- Design and execute Simulink simulations of the opto-electrical systems.
- Design digital and analog real-time systems.
- Drive intensive integration of various hardware and software components, ensuring seamless integration of VoxelSensors' sensors, processing units, and proprietary eye-tracking algorithms, with an emphasis on control system architecture
- Participate in initial conceptual development and carefully balance product specifications, process requirements, complexity, cost, and lead-time limits.
- Collaborate closely with cross-functional teams of hardware, software, and algorithm engineers to deliver a high-performance, product-ready wearable eye tracker, focusing on the validation of control algorithms and system performance.
- Write and maintain clear documentation.

Skills & Experience

• Master's degree in Engineering or Applied Physics, with a focus on Control, Control Systems, Mechatronic Engineering, Automation Engineering, etc.

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- Experience as a hands-on Controls Engineer or Robotics Engineer working on automation and/or electromechanical/electro-optical systems 5 or more years
- Real-time programming for FPGA and/or DSP modules 4 or more years
- Strong technical foundation in signal processing and control theory
- Proficient in Simulink and Matlab or Python
- Able to work with different control technologies
- Excellent testing and troubleshooting skills
- Ability and passion for perpetual learning
- Excellent communication skills

Nice to Have

- Demonstrated analog circuit design experience
- Experience transitioning products and processes from prototype to production
- Knowledge of production quality metrics
- Proficiency with 3D CAD packages, such as with SolidWorks

What We Offer

- Impactful Work: A key role in a deep-tech startup with the opportunity to shape the future of perception.
- Intellectual Challenge: Complex system-level challenges that will advance your technical expertise on control of dynamic systems with a human in the loop.
- Global Team: A dynamic, international, and highly motivated team of experts in their fields.
- Competitive Compensation: A strong compensation package commensurate with experience.
- Flexibility: A modern work environment that embraces flexibility and supports a healthy work-life balance.

You need to know that the office is located in Brussels, Belgium. We offer a hybrid work model to combine the benefits of in-person collaboration with the flexibility of remote work to help us achieve our ambitious goals. Our company is committed to fostering an inclusive, high-performance culture where all employees are valued for their unique contributions and individual merit.

How to Apply

Please send your resume and a brief cover letter explaining your interest in the role to <a href="https://http

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Privacy notice:

By submitting your application and resume by email, you acknowledge that your personal data contained in such documents will be collected and processed by VoxelSensors SRL/BV (a company with registered offices at Cantersteen 47, 1000 Bruxelles (Belgium) and registered with the Crossroads Bank for Enterprises under company number 0745.364.628 -"VoxelSensors") for the purpose of managing your application. VoxelSensors processes such personal data on the basis of its legitimate interests (i.e. managing your application). VoxelSensors has implemented appropriate technical and organisational measures in order to safeguard your personal data against any accidental or illicit destruction, accidental loss, modification, deterioration, usage, access, divulgation and against any other unauthorized processing of your personal data. VoxelSensors will not make your personal data publicly available. Steps will be taken to ensure that your personal data is not kept for longer than is necessary. Your personal data will be retained for as a long as necessary to manage your application and for no more than two (2) years following the termination of your potential recruitment process (to contact you in case a new job offering may fit your profile) or five (5) years following the termination of your employment, as applicable, unless VoxelSensors has a specific legitimate interest in storing your personal data for a longer period (e.g. to comply with a legal obligation or in the framework of a litigation). Any personal data which is contained in VoxelSensors' or any of its processor's regular backups will not be deleted, provided that any such personal data shall remain subject to the applicable confidentiality, data privacy, and security obligations until destroyed.

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