

Controls & Software Engineer

Cruden develops human-in-the-loop simulators for training and R&D purposes. Our products enable Formula 1 teams to design faster cars and coastguards to train effectively for saving people from the next big storm. Our simulators are key tools in the development process of future cars and are used for scientific research into safe and comfortable autonomous transport. Cruden is a rapidly growing SME with a family feel and ample opportunities for professional growth.

We are looking for a highly motivated Controls & Software Engineer to join our Software Development team. Creating a simulator often requires integrating vehicle models created in or with MATLAB/Simulink. For this we created interfaces in MATLAB/Simulink. This is where you will spend a big part of your time, maintaining and optimizing this code. We also have made these for hard-realtime systems like dSpace, Speedgoat and Concurrent. If you have experience with systems like that that would be a big plus.

The Software Development team consists of software engineers with a wide variety of competences, such as low-level C++ and C# programming, embedded systems, real-time simulation, render engine development, complex mathematics for surface interaction, automated testing, artistic content creation, visual projection systems and many more.

About you:

- you have a higher education degree in systems and control, informatics, (vehicle)engineering or mathematics.
- you have an affinity with software development
- you have (extensive) knowledge of control, and filtering/signal processing algorithms
- you have extensive knowledge about MATLAB/Simulink and can proof this.
- you have experience with hard-realtime systems like dSpace, Speedgoat & Concurrent.
- you are a big proponent of Test Driven Development.
- you are familiar with continuous integration tools such as GitLab.
- you wish to work fulltime.
- you're fluent in English or Dutch.

Nice to have:

- experience with CMAKE.
- experience programming in C/C++.
- experience developing for Linux-based systems.
- experience with real-time simulation software.
- knowledge about vehicle models.
- knowledge about IPG Carmaker, Carsim, Siemens Prescan, ASM.
- knowledge about traffic engines like VTD, Sumo, ASM Traffic.

About us - we'll offer you:

- A representative salary, 25 holidays and a pension plan;
- Flexibility in working hours and location;
- A highly motivated and competent team that can't wait for you to join them;
- The opportunity to improve one of the most eye-catching parts of our simulators;
- An open-minded company with a family feel and a flexible attitude.

Do you live in the Netherlands and can you commute to Amsterdam on a daily base? Do you have what it takes to develop a rendering pipeline used by the most demanding people in the business, such as Formula 1 drivers and navy seals? Then we'd love to hear from you! Even if you don't tick all the boxes.

Please send your application (including motivation and resume) to jobs@cruden.com