

Ars Electronica Spaxels GmbH is a division of Ars Electronica Linz GmbH & Co KG, a wholly-owned subsidiary of the City of Linz, Austria. Ars Electronica Spaxels GmbH's mission is developing, operating and marketing an internationally unique technological innovation in the field of unmanned aerial vehicles (drones). For details, see www.aec.at/spaxels. Ars Electronica Spaxels GmbH is active worldwide as producer of a wide variety of events showcasing the Spaxels aerial capabilities—most recently in Australia, Dubai, China, the USA and throughout Europe. To support our R & D - Team, we have a job opening for a

Software Developer Embedded-C

(Number of hours/week: 40)

It all began with the vision of rendering a dynamic 3-D display in the night sky and exploring the potential of visualization technology in this setting. Following extensive research on potential technologies, the decision was made to go with quadcopters equipped with an LED module as their display technology (space pixel).

To coordinate the transformations of the airborne Spaxels display, swarm control software and a ground control unit were developed and proprietary adaptations to the aircraft's software were carried out. The first public demonstration of the Spaxels concept took place at the *Klangwolke* [Cloud of Sound], an annual open-air spectacle in Linz. In 2012, a swarm of 49 quadcopters ascended into the night sky and formed impressive illuminated 3-D patterns. In 2015 Ars Electronica and Intel collaborated on a feat that made it into the Guinness Book of World Records—the first simultaneous, computer-controlled flight of 100 quadcopter.

Job description:

Your area of responsibility will be to develop new features for our flight control software. Proceeding from an analysis of substantive requirements, you will work together with the head developers to create the necessary software architecture and work on implementing it. Your area of responsibility will include all phases of prototype construction, design, implementation, testing and documentation. The primary emphasis will be on the technical enhancement and upgrading of unmanned aerial vehicles.

You possess the following qualifications, skills and qualities:

- College-level studies in the fields of computer science/electronics/mechatronics and/or corresponding occupational experience
- Experience in locating errors in digital circuits (multimeter, oscilloscope)
- Experience in the area of embedded-C programming
- Experience with ARM processors (STM32FX, LPC214X)
- Ability to work in a team and to cope with pressure; flexibility
- Solid command of English (both written and verbal)

Experience in the following areas is especially desirable:

- Real-time operating systems (ChibiOS, NuttX, etc.)
- UAV autopilot systems (sensors and sensor fusion, control technology)
- Digital circuit design and model construction (aircraft, helicopter)
- Communications technology/embedded wireless technologies
- Vision-based sensing technology

We offer an open corporate culture, a highly motivated, creative, international staff, and diverse projects in an international setting.

The gross salary (before deductions) computed on the basis of 40 hours/week will be a minimum of 2.214,78/month. Higher compensation will be paid commensurate with the successful applicant's experience in fields relevant to the performance of this job.

Ars Electronica Spaxels GmbH is an equal opportunity employer. Accordingly, in cases of equal qualifications, female candidates' applications for this position will be treated preferentially.

Individuals with handicaps are especially encouraged to apply for this position.

Please apply by submitting a résumé via e-mail by July 2nd, 2017 to:

Ars Electronica Linz GmbH & Co KG
Personalmanagement (jobs@aec.at)
Ars-Electronica-Straße 1
4040 Linz

Stephan Kobler
Personalmanagement

Ars Electronica Linz GmbH & Co KG
Ars-Electronica-Straße 1,
A-4040 Linz
Telefon: +43-732-7272-15
E-Mail: jobs@aec.at
www.aec.at