István Nagy

Electrical Engineer - Embedded Systems

Profile

Passionate about programming and learning new technologies. I have gathered experiences as software developer mostly in the field of Automotive and Automation Systems. From both fields I have learnt how to make reliable and safe software and hardware components.

I have developed projects started from making specifications and requirements through making software and hardware component to documentation and delivery.

I like to work indepedently but also I consider myself as a team player especially when a project requires other engineering fields to be merged.

Contact

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Expertise

- C/C++, Python, Latex, PCB design
- Image processing, Computer Vision
- AUTOSAR Classic Platform
- FreeRTOS, Linux, STM32, Raspberry Pi

Languages

- English(B2) - Daily use and professional working proficiency
- Hungarian - Native

Other interests

- Music production - FLStudio
- VJ production - Resolume

Education

- **Óbuda University - KVK**
  Electrical Engineer (BSc.)
  2015 - 2019
  Specialisation: Automation - Embedded Systems expert
  Classification of the qualification: Outstanding

Experiences

- **Electronics Development Engineer**
  Unix Autó Kft., Budapest, 1139

  I was the part of the Research and Development team. The main portfolio of the department was warehouse automation system development.

  I was responsible for:

  - specificate and making requirements about the project and calculate deadlines for each individual tasks
  - design circuit in Altium or KiCAD with 2 or 4 layers of PCB (THT and SMD components as well)
  - search and order required components and keeping contact with suppliers
  - developing source code for STM32 development boards (or Raspberry Pi)
  - Making unit test framework for functional testing and lifetime testing hardware components
  - Prepare user guide or assembly guide for technicians (with Latex and UML)

  Projects:

  Robot arm positioning with computer vision: I was developing QR Code detection algorithm with the help of OpenCV in C++. The QR code was responsible to show the middle point of an object. If the center point was found then the coordinates were sent via CAN to a STM32 control board and the robot arm was moving according to that.

  Slide level detection with computer vision: