

Hangzhou, China
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CARL IGELSTRÖM
MSc. Electrical Engineering

<https://www.carlw.se>
<https://github.com/ugglr>

CORE COMPETENCES & SKILLS

- **Electronics:** Experienced Mixed Analog & Digital Schematics Designer (HF/RF). EMC Certification. Mentor Graphics Pads Logic Vx and Layout; Windchill (PLM); Labview;
 - **SoC Development:** VHDL; Verilog; Cadence (Virtuoso, ADE L, Layout XL); Xilinx FPGA; Questasim.
 - **Front-End:** HTML5; CSS3; JavaScript: Core, ES6.
 - **Back-End:** JavaScript: Node.js; JAVA; Spring Boot; Gradle. Python: Flask, Django.
 - **Other:** Git/Version Control; IDE (Eclipse, VS Code); MatLab; MS Teams; Slack; Scrum.
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PROFESSIONAL EXPERIENCE

Exp. Electronics Engineer **Axis Communications, Lund SWE** **Sep. 2015 – Jan. 2019**

- **Axis P8815-2:** Development Leader/Tech. Lead. Analogue/Digital HW Designer. Machine Vision & Deep Learning Hardware with several new solutions implemented, full product responsibility.
- **Axis P7304:** Analog to Digital Video Encoder. HW Designer, Component Sourcing, Testing, EMC.
- **Axis Q1659:** *Enterprise 20Mp Network camera.* HW Testing and QA/EMC. Co-Dev. Canon Japan
- **Axis Q3708-PVE:** Enterprise Quad HD 180° network camera. HW Testing and QA/EMC.
- PCB Electronics; Analogue/Digital mixed Schematic Designer, New Product innovation. (PADS Vx)
- Verification of signal integrity and system robustness, laboratory testing (QA, Thermal eval. Etc.)
- Responsible for PCB CAD on designs.
- Electromagnetic compatibility (EMC) testing and Certification; CE, UL, FCC, TUV, KCC, Rolling Stock.
- Agile hardware testing workflow expert; Kanban, Scrum, Jira, MS Teams Tech. support.
- Product Lifecycle Management (PLM: Windchill) Super User, future feature group & Tech. support.

Software Engineer Intern **Wayne, GE Oil & Gas, Malmö SWE** **Jun. 2014 – Sep. 2014**

- Developed automated production HW tests using Labview, Machine Vision and Machine Learning.
- Executed prototype plans for automated sensor calibration rig, Bench and equipment sourcing.

Electrical Engineer Intern **Electrolux, Shanghai CN** **Jun. 2012 – Aug. 2012**

- Prototype development; Hardware implementation + Embedded Linux programming.
 - UX/UI Study: Design of Android application touch interfaces on small home appliances.
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EDUCATION

MSc. Electrical Engineering **Lund University. Lund, SWE** **Fall 2009 – Fall 2015**

- **Specialization:** Design of Processors and Digital Systems (SoC); China Profile.
- **Graduate Coursework:** Structured VLSI Design on FPGA (VHDL+Xilinx), Digital IC-Design (CMOS), DSP-Design, MEMS Fabrication on Silicon, Integrated AD/DA converters, Large Scale SW Development, Advanced Analogue Amplifiers, Java: Advanced Course. (all courses in attachment)
- **Undergraduate Coursework:** Analogue and Digital Electronics, Mathematics, Physics, Numerical Analysis, Statistics, Databases & Algorithms in Java, Digital Signal Processing, Java Fundamentals.
- **Master Thesis:** HDMI Signal Tapping and Digital Encoding over TCP/IP. Successful prototype.
- **Exchange:** Zhejiang University, Hangzhou China, half year special program for civil engineers.

Mandarin & Chinese Culture **Zhejiang University. HZ, CN** **Aug. 2013 – Aug. 2014**

- Chinese Language and culture exchange. HSK 4 equivalent.
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Languages:

English: Full Professional Proficiency. Chinese: Professional Proficiency. Swedish: Native.
