Hangzhou, China WeChat: carl-igelstroem

# CARL-W. IGELSTRÖM

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#### **EMPLOYMENT**

### **Electronics Engineer**

## **Axis Communications, Lund Sweden**

Sep. 2015 – Jan. 2019

- PCB Electronics; Analogue/Digital mixed Schematic Designer and New Product innovation.
- Verification/testing of signal integrity and system robustness (stress testing, Thermal evaluation)
- · 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, Task Sprints etc.
- Product Lifecycle Management (PLM: Windchill) Super User, future feature group & support.

## **Project Electrical Engineer**

Wayne, GE Oil & Gas, Malmö Sweden

Jun. 2014 - Sep. 2014

- Successfully developed automated electronics testing rig using Labview and machine vision.
- Executed prototype plans for automated sensor calibration rig, Bench and equipment sourcing.

## Intern. Electrical Engineer

**Electrolux, Shanghai China** 

Jun. 2012 – Aug. 2012

- R&D Engineering internship based in Electrolux Small Home Appliances Shanghai laboratory.
- Hardware and Android software touch interface prototype development.

#### **EDUCATION**

#### **Lund University**

Lund, Sweden

Fall 2009 – Fall 2015

- M.S.E. in Electrical Engineering, China Profile: Design of Processors and Digital Systems, Faculty of Engineering: Electrical and Information Technology.
- **Graduate Coursework:** Structured VLSI Design (VHDL), Digital IC-Design (CMOS)DSP-Design, Micro sensors / MEMS, Integrated A/D & D/A converters, Software development of large systems.
- Undergraduate Coursework: Analogue and Digital Electronics, Mathematics, Physics, Numerical Analysis, Statistics, Databases & Algorithms in Java, Digital Signal Processing.
- Exchange: Zhejiang University, Hangzhou China, half year special program for civil engineers.

#### **Zhejiang University**

Hangzhou, China

Aug. 2013 – Aug. 2014

- Chinese Language and culture exchange. HSK 4 equivalent.
- Exchange offer given to promising engineering students within the class.

### **PROJECTS**

- Axis Q1659: Enterprise 20Mp surveillance camera that uses DSLR lenses. Project with Canon Japan
- AXIS Q3708-PVE: Quad HD 180° panoramic enterprise grade network camera.
- Master Thesis: HDMI Signal Tapping and Digital Encoding for IP Monitor Surveillance. Successful development of working prototype, surveillance on HDMI monitors over TCP/IP.
- Loan and Living calculator: <a href="http://www.boendekostnad.nu">http://www.boendekostnad.nu</a> (Under Construction).

#### **ADDITIONAL EXPERIENCE AND AWARDS**

- Freelance Digital Illustrator: Concept art, Web design, Photoshop paintings & Illustrations.
- Little league Badminton Coach: Trainer to a group of 20 boys in the range of 10 12 years old.

## **Languages and Technologies**

- SoC Development: VHDL; Verilog; Cadence (Virtuoso, ADE L, Layout XL); Xilinx FPGA Suite;
   Questasim.
- Electronics Development: Mentor Graphics Pads Logic Vx and Layout; Windchill (PLM).
- Front-End: HTML; CSS; JavaScript: Core, ES6.
- Back-End: JavaScript: Node.Js; Java; version 8;9; Spring Boot; Gradle. Python: Flask.
- Other: Git/Version Control; IDE (Eclipse, VS Code); MatLab; Labview; MS Teams; Slack; Scrum.