



Instrumentvägen 12A, 19451 Upplands Väsby, Sweden

UPDAL SOLUTIONS

Engineering, Sales & Operations!





"We are working as an extended engineering partner to companies. We design, develop, operate products within IoT. We are also working as engineering and management consultants for shorter projects. Our engineering team operates within Mechanics, Hardware, Firmware/Software, and we are also operating devices in the field with our own backend solution."

MEET THE TEAM



Kjell Karlsson

CEO

Project Management, Interim Management, Connectivity Management, Sourcing Strategies, Supplier Management, Logistics, Manufacturing support.



Christer Krebs

COO / Sales

Sales Management, Business Management, Project Management, Sourcing, Manufacturing coordination, Logistics.



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MEET THE TEAM



Ray Zhou

Infrastructure/DevOps

BackEnd Solutions, Machine Learning, AI, Firmware, Electronics, Mechatronics.



Laurent Nogueur-PhD

Ext. – SW/FW

Embedded Firmware, BackEnd Solutions, Antenna Solutions, Architecture solutions.



Mike Li

Ext. - Senior Mechanics

Mechanical Engineering, Tool Fabrication, Supplier engagements, ID Design realization, China coordination



Peter Lindberg-PhD

Sr. Hardware

Hardware Solutions, Layout, Schematics, EOL management, Alternatives, Antenna Designs.



James Hough

Ext. – Embedded Solutions

Embedded Firmare, Architecture Solutions.



www.linkedin.com/in/james-hough-23a97341/



"I am a highly motivated Embedded Software Engineer. Designing and implementing high integrity embedded software systems for both medical and automotive systems"



JAMES HOUGH – EMBEDDED SOFTWARE ENGINEER

EXPERIENCE

UPDAL SOLUTIONS (AUG 2025 - NOW)

Working with Embedded Software on our S-2Connect family as well as working with other SW solutions in Updal. I am external consultant for Updal.

EMBEDDED TECHNOLOGIES LTD (JUL 2011 -)

Own consultant company

ACCUTRONICS LIMITED (JAN 2012 – APR 2013)

Developed Software solutions for a number of Smart Battery Chargers. I designed and developed a Smart Charger O/S that allows for rapid development of Firmware for current and future hardware products

ATP CONSULTANTS (JUL 2011 – JAN 2012)

Working on Battery Management System for Electric Vehicle for a Major Vehicle Manufacturer.

EDUCATION

MASTER OF SCIENCE (2006-2007)

Northumbria University; degree in embedded systems design with Grade: distinction.

MANCHESTER METROPOLITAN UNIVERSITY (2001-2005)

Software Engineering



**Northumbria
University**
NEWCASTLE



Are you getting enough out of your connectivity solutions today?

MISC.

DRIVER DEVELOPMENT

Examples:

CAN, UART, SPI, Flash Memory, Serial Shift, I2C, RTC

TOOLS

Examples:

Code Composer Studio, PC-Lint

MICROPROCESSOR:

Examples:

ARM7 , MSP430

EMBEDDED LINUX DEVELOPMENT:

Examples:

U-Boot, Yamon - Kernel Development/Modification - Linux Driver Development



www.linkedin.com/in/rui-zhou-450298142/

"Highly skilled and accomplished Engineer with a strong background in Mechatronics and Data Engineering, Highly motivated and Results-Oriented."



RUI (RAY) ZHOU – INFRASTRUCTURE/DEVOPS ENGINEER

EXPERIENCE

UPDAL SOLUTIONS (AUG 2025 – NOW)

Working with our own solution and handle connectivity, backend and devices. Make sure all works in harmony and deliver data everyday.

PUTAILAI NEW ENERGY TECHNOLOGY CO., LTD (NOV 2023 – MAR 2025)

Contributed to the execution of an international investment project worth SEK 13 billion. Led strategic negotiations with industrial parks and utility providers to secure land, water, and power approvals. Managed supplier relations and conducted tendering processes.

VOLVO CARS (NOV 2022 – NOV 2023)

Collaborated with cross-functional teams to acquire and evaluate research data, ensuring seamless project execution. Machine learning in monitoring vibration and algorithm optimization. Delivered comprehensive project reports and contributed optimized feature space for vibration monitoring and improved accuracy of classification

EDUCATION

MASTER OF SCIENCE – COMPUTER SCIENCE (2021 - 2023)

MASTER OF SCIENCE – MECHATRONICS & ROBOTICS (2018 – 2019)

BACHELOR – MECHANICAL ENGINEERING (2015 - 2018)



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MISC.

PROGRAMMING LANGUAGES

Python/C++/C/R/HTML/ CSS/JavaScript/SQLDeveloping

AWARDS

Ericsson Innovation Award (Semi-Finals)

International scholarship from Uppsala University

Scholarship from University of LeedsHighly

DESIGN TOOLS

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www.linkedin.com/in/laurent-noguer-219a5b5

"Doctor in Physics & Engineer in industrial computation and instrumentation"



LAURENT NOGUER – SOFTWARE/FIRMWARE

EXPERIENCE

UPDAL SOLUTIONS (APR 2023 – NOW)

Working with Embedded Software on our S-2Connect family as well as building our own Back-end solution

TT ELECTRONICS (JAN 2017 – MAR 2023)

Led platform development of an IoT solution that is nowadays collecting data from tens of thousands of devices in the field. Worked alongside backend developers, QA and firmware engineers.

PARROT / DIBCOM (JUN 2005 – DEC 2016)

Expert RF test system developer. In charge of the DVB-T/H RF tuner validation designed in our Kista Office. Involving test bench design & Integration.

NANORADIO (NOV 2004 – JUN 2005)

Senior RF test system development engineer. Implemented of a Test setup to validate the RF front end of the WLAN IC design internally (DC, RF Gain, Noise figures, phase noise, EVM, output power)

EDUCATION

PHD IN PHYSICS (1996 – 1999)

"Electromagnetic radiation from a PCB dedicated to Fast Logic applications", Great honors.

MASTER OF SCIENCE (1995 – 1996)

degree in optical, Opt-electronic and Microwave in Institut National Polytechnique de Grenoble (INPG) with honors.

ENGINEER 3I OPTION ELECTRONIC (1992 – 1995)

with honors

MISC.

PROGRAMMING LANGUAGES

Embedded C, Golang...

ASSIGNMENTS

Embedded Firmware, SW work with Backend Solutions, Test system development

LANGUAGES

French, English, Swedish, Spanish (school), Polish (smatter)

DESIGN TOOLS

Altium | Eagle | Orcad | Protel | Cadstar | ADS | ARRL | APLAC | Microwave office | IE3D | CST | NEC | HFSS | Momentum (Agilent) | Xilinx | Spartan 3 | Labview 7.1 | Teststand 3.1 | Labwindows CVI | Golang | Vbasic | C | C++ | Java(Android) | FLASH smattering | Perl & Python smattering | Qt | Qwt librairies | Postgres | MySql | Matlab | Mathcad | VHDL | Excel | Word | Database |



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<https://www.linkedin.com/in/christer-krebs-58a25716/>

"Manages operations, implements strategy, ensures efficiency"



CHRISTER KREBS – COO & SALES

EXPERIENCE

UPDAL SOLUTIONS (APR 2023 – NOW)

Oversees daily operations, implements strategies, manages resources, ensures efficiency, driving sales & growth, enhances performance, ensures compliance.

TT ELECTRONICS (MAY 2016 – MAR 2023)

I was working to achieve and surpass sales targets. I developed strategic sales plans based on my company goals I built and maintained strong relationships with key clients, ensuring long-term partnerships. Additionally, they collaborate with other departments to align sales strategies with overall company objectives.

SZ SUNWAY COMMUNICATION CO. LTD (APR 2012 – MAY 2016)

I managed overseas customers, ensuring smooth communication and strong relationships. I developed strategies to enter and expand international markets. This role required understanding diverse cultural and business practices to tailor sales approaches effectively.

LAIRD TECHNOLOGIES (FEB 1999 – SEP 2011)

I was the responsible manager to build up a new development site in San Jose. Our objective was to support the North America mobile handset companies with local customer support and design for antenna and audio solutions.

In my early days I worked as Mechanical Engineer, Program Manager & Engineering Manager for same company

EDUCATION

MASTER OF SCIENCE - MECHANICS (1991 – 1995)

KTH – Royal Institute of Technology, Stockholm.



MISC.

SKILLS

Sales & Business Management, Program management, Manufacturing, R&D Management

ASSIGNMENTS

R&D Management, Interim Management, Sales Leadership

LANGUAGES

Swedish, English



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<https://www.linkedin.com/in/yuxiang-li-3a00a320/>

"Skillful senior Mechanical Engineer with R&D director knowledge"



YUXIANG (MIKE) LI – SENIOR MECHANICAL ENGINEER

EXPERIENCE

UPDAL SOLUTIONS (APR 2023 – NOW)

Product design, from sketch to mass production, covers the product ID design, Structure design and manufacture follow up. Supplier sourcing and management. Technical support for manufacture

TT ELECTRONICS (DEC 2018 – MAR 2023)

TT brand IoT device product design, from concept to mass production, covers the product ID design, Structure design and manufacture follow up. Cooperation with customer ID/HW team to implement structure design. Support guide cross function team (Local and overseas) for complex issue debugging and analysis. Based on project budget to monitor and maintain related cost.

SZ SUNWAY COMMUNICATION CO. LTD (NOV 2012 – DEC 2016)

Act as Sunway R&D director to cover Sunway all R&D site, include Shenzhen, Beijing, Shanghai, Xi'an; Build up the RD capability in Shenzhen to support Global customer such as Apple, Microsoft, Google and Lab126, total team from zero to 30+ managers/engineers, customer revenue from 10M USD to 50M USD/Month, engineering Qualification approved by all global customers. Enhance the Beijing RD capability to support Apple customer, Project total revenue from 30M USD to 100M USD/year, product line covers all Apple product line. Yearly technology roadmap definition and drive the team to realize, Leading quarterly technical show with customer RD and engineering team to stability the technical leading position in customer side. All RD site KPI define and monitor

EDUCATION

NORTH CHINA UNIVERSITY OF TECHNOLOGY (1998 – 2002)

Electrical and Mechanical Engineering.



MISC.

PROGRAMMING LANGUAGES

Expert in SolidWorks, COSMOS, CATIA, DFA, FMEA

ASSIGNMENTS

Plastic Design, Sheet Metal, Die-Casting, ID work, Mech Design, Product Design, R&D Management

NOTES

With 20+years of experience in the handset and consumer electronics industry, including 10+ years engineering/Project team management experience, work on a wide range of projects and a deep understanding of the research and development process

COMPANIES

16+ Years experience in foreign multinational companies, including 8+ years of Consumer electronics product design & development experience and 8+ Years of engineering team management.



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<https://www.linkedin.com/in/kjell-karlsson-4283665/>

"Working with fantastic people in the world of IoT! A global leader with a lot of experience"



KJELL KARLSSON – CEO

EXPERIENCE

UPDAL SOLUTIONS (OCT 2023 – NOW)

Leading the company as well as working with Program Management and co-ordination of suppliers and customers. Titles earned: CEO, Founder, Board Member

TT ELECTRONICS (MAY 2016 – SEP 2023)

We deliver fully integrated design-led electronics technology solutions and global manufacturing and fulfilment solutions, simplifying the supply chain and reducing time to market for our customers. Titles earned: Managing Director, Group Head Of Sales, VP Engineering, Board Member

SZ SUNWAY COMMUNICATION CO. LTD (APR 2012 – APR 2016)

Shenzhen Sunway Communication Co., Ltd. has grown into a global leading solution provider of RF parts and assemblies in the communication industry, focusing on R&D, manufacturing, sales & marketing of the mobile terminal antennas and related modules, acoustic modules, and connectors with high electromagnetic compatibility. Titles earned: Managing Director, General Manager, Board Member

LAIRD TECHNOLOGIES (JAN 2000 – MAR 2012)

We are experts in connecting and protecting advanced electronics. Our engineers design, develop and deliver solutions for our customers as they push the boundaries of technology. We operate globally. A partner to many of the world's leading technology brands. Together, we are solving the challenges of today and anticipating those of tomorrow. Titles earned: Director Of engineering, R&D Manager, Engineering Manager, Senior Engineer.

SUMMARY

KJELL KARLSSON

After several years in global co-ordination positions, I am an experienced leader with proven track records. I am a leader with experience to lead engineers as well as regional & global directors.

I am a rated 3-star manager in two independent surveys, I am good at building/re-building organizations both locally and globally and I have long experience in concurrent engineering and processes that connects regions in management, sales, and operations & I have worked to create products/processes globally.

As a board member in multiple countries & that I have spent 17 years within telecom as a component supplier and 6 years in IoT as a product maker. All the positions have a common thing, it carries a high technical content which has formed me as an engineer, manager, and mentor. I am/have been working with highly educated people and great leaders which also has influenced my way of approaching things. This together that I have been working/living abroad for several years has been giving me a knowledge of cultural differences which is essential when creating business and solutions.



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MISC.

HONORS

2021 Certified 3 Star Manager (Best Companies) – Employee Survey and 2nd year in row to get this reward.

2020 Certified 3 Star Manager (Best Companies) – Employee Survey

ASSIGNMENTS

R&D Management, Interim Management, Sales Leadership

EDUCATION

Mälardalens Högskola – Engineering (1997-1998)

LANGUAGES

English, Swedish



<https://www.linkedin.com/in/peter-lindberg-37a0635/>

"Senior & Specialist in Antenna and Hardware Designs."



PETER LINDBERG – SENIOR HARDWARE ENGINEER

EXPERIENCE

UPDAL SOLUTIONS (APR 2023 – NOW)

Electronics designer working with domestic and international customers. Responsible for project definition, architecture, part selection, floor plan, simulations, detailed design (schematics and layout), prototype ordering, testing and verification, certification and production ramp-up

TT ELECTRONICS (AUG 2016 – MAR 2023)

Electronics designer of wireless products, sometimes doubling as project manager, working directly with customers ranging from start-ups to companies with legacy hardware that needs modernization/feature updates.

ABB (MAY 2013 – JULY 2016)

Automated verification measurements of expansion modules for IED670 relay protection units. HW design and calibration algorithms for new generation of fiber-optical Line Data Communication Modules (LDCM). HW design of updated Binary Input Module (BIM).

TE CONNECTIVITY (OCT 2011 – APRIL 2013)

Firmware development in C for 8/16 bit micro-controllers used in fibre-optical cables

LAIRD TECHNOLOGIES (NOV 2008 – SEP 2011)

Research and design of radio frequency circuits and antennas for terminal and laptop applications. Development of measurement techniques and characterization methods for active small antennas.

EDUCATION

PHD IN ENG. PHYSICS, MICROWAVE TECHNOLOGY (– 2007)

"Wideband Active and Passive Antenna Solutions for Handheld Terminals"

LICENTIATE OF TECHNOLOGY IN ENG. PHYSICS, MICROWAVE TECHNOLOGY (- 2005)

"Radio Frequency Integrated Circuits for 24 GHz Radar Applications"

MASTER OF SCIENCE IN ENG. PHYSICS (– 2000)

"Optimization of Microstrip Patch Antenna using Genetic Algorithms"



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REMARKS

9 journal & Magazine publications, 25 Conference publications, 50 Global patents, Multiple Awards

ASSIGNMENTS

Hardware, Antenna, Testing, Quality Management, Root Cause

OTHER

Worked as teacher in electronics and microwave engineering at Uppsala University

DESIGN TOOLS

Altium Designer | Pulsonix | MATLAB | Advanced Design Studio | Momentum | CST Microwave Studio | HFSS | AWR Microwave Office | IE3D | MS Office |