

Jukka Roitto

Senior Industrial Designer | Product Development | Computational Design | AI Adoption in Design and Engineering

Kuopio, Finland

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SUMMARY

Industrial designer (MA) with 14 years of experience in product development from concept to series production, and creator of published CAD software for Rhino and Grasshopper built with AI coding agents. Combines industrial design, design for manufacturing (DFM), computational design and hands-on generative AI to shorten the path from design to production.

SKILLS

Design: Industrial Design, Product Development, Concept Design, Design for Manufacturing (DFM), Prototyping, 3D Modelling, CAD, Technical Drawings, Production Documentation, R&D

Computational design: Rhino (Rhinoceros 3D), Grasshopper, Parametric Design, Computational Design, Design Automation, Process Development

Tools: Rhino (expert), Grasshopper, Adobe Photoshop, Illustrator, SolidWorks (basics), AutoCAD (basics), WordPress

Artificial intelligence: Generative AI, AI Agents, AI-assisted Software Development, Claude Code, Requirements Specification, Acceptance Testing, AI Adoption

Product: Product Management, Software Testing, Release Management, Software Licensing, Technical Documentation, Customer Support

Domain: Marine Industry, Boat Interiors, Seating, Furniture, Mechanisms, Sheet Metal, Welded Structures, Plastic Parts, Plywood, Upholstery, Soft Goods

WORK EXPERIENCE

Industrial Designer

VA-Varuste Oy, Kuopio, Finland

September 2012 – Present

- Lead designer of the products VA-Varuste supplies to Saxdor Yachts, since the brand's start in 2019: upholstery systems, sofa mechanisms, pilot seats, canopies and covers for Saxdor's award-winning boat models.
- Product development of VA-Varuste's products for Nimbus, Sargo, Finnmaster, Bella and Grandezza, from concept design to production-ready documentation, using both traditional on-boat measuring and templating and 3D modelling in Rhino.
- Designed structures and parts beyond textiles: welded tube and sheet metal frames, laser-cut metal and plywood, CNC-cut foam, PUR foam moulds and plastic parts, with technical drawings for subcontractors.
- Designed seating and furniture with integrated mechanisms: convertible sofas, sunbeds and pilot seats.
- Process development: identified repetitive steps in the design-to-production workflow and automated them with Grasshopper.
- Developed the company website and online store (WordPress, WooCommerce, Elementor): large-scale site changes, translations and custom PHP plugins, carried out with AI agents (Claude Code) over SSH.
- Worked daily with production in Finland and Poland and with boat builders' design and engineering teams during new model development.

Founder

Roitto Design Works, Kuopio, Finland

February 2026 – Present

- Parametric boat canopy design tool for Rhino, the subject of the master's thesis: in development since 2024. Powered by Grasshopper running headless behind its own user interface, so users need no Grasshopper knowledge.
- RhinoChelae: mechanism and constraint solver for Rhino with joints, gears, chains and gravity. Published in the Rhino Package Manager for Rhino 7 and 8, covered by over 700 automated tests.
- RhinoNotchesPro: notch generation plugin for Rhino, published in the Rhino Package Manager.
- Idunian Liberators: nutrition education card game published on Google Play in six languages, content reviewed by a nutrition therapist.
- Ran the full product cycle with AI coding agents: requirements, architecture decisions, geometry and solver logic, acceptance testing in Rhino, licensing backend, protected builds, security review, websites, documentation and product videos. Technologies used: C#/.NET, Python, Firebase, Paddle.

Sales Representative

Telecom and digital services companies, Kuopio, Finland

June 2009 – June 2012

Consumer sales of telecom operator products; B2B sales of websites and directory services.

Part-time Teacher, Product Visualization

Kuopio Academy of Design, Savonia University of Applied Sciences, Kuopio, Finland

August 2010 – October 2010

Designer, Concept and Graphic Design

Savonia University of Applied Sciences, Savonia Street Bike motorcycle project, Kuopio, Finland

November 2009 – April 2010

Designer, Concept Design and Model Construction

Chasswheel Oy, Finland

June 2008 – October 2008

EDUCATION

Master of Culture and Arts (Muotoilija YAMK), Innovation Expertise

Savonia University of Applied Sciences, Kuopio, Finland

2024 – 2026

Thesis: Formalizing Tacit Knowledge into a Parametric Design Tool: Automating Boat Canopy Design (2026).

Bachelor of Culture and Arts (Muotoilija AMK), Industrial Design

Kuopio Academy of Design, Savonia University of Applied Sciences, Kuopio, Finland

2005 – 2010

Thesis: From Tool to Assistant: the E-Motion HQ Light Vehicle Scenario (2010).

LANGUAGES

Finnish: native. English: good.

AWARDS AND EXHIBITIONS

- Designed supplier products that are fitted to several award-winning production boat models.
- Vespa Award (IDEA'09): most innovative design project, 2009.
- Exhibitions: Piaggio Museum, Pontedera, Italy, 2009. Design Forum Finland, 2009.