HUIZHONG CAO

AI integrated XR for optimized user experience and smart production system

huizhong@Chalmers.se +46 768842590 Doktor Wingardhsgata 2
Gothenburg 41681, Sweden https://research.chalmers.se/en/person/huizhong huizhongcao

EXPERIENCE

PhD Candidate & Researcher
Chalmers University of Technology

Mar 2023 – Mar 2027 Gothenburg, Sweden

- Digital twin and 3D modelling for sustainability
- VR/AR/User interface design to optimize the production flow and human-centered machinery production system
- Study on how to conduct virtual training effectively with digitalization tools including VR and AI integrated social robot, with experiment design and demonstration
- Cognitive load assessment methods with a comprehensive dimensions including HRV, RSME, NASA TLX and performance based assessment
- human centric design approach for Industry 5.0

Co-Founder & Chief Designer
Emofria AB https://emo-fria.webflow.io/

Jun 2024 – Present Västerås, Sweden

- CE certificated portable air purifier with focus target on allergy elimination for EU market
- Design the brand, a series of products, supply chain, website design and CE certificate for the brand

XR Product Developer
BIGmind Innovation

Nov 2021 – Feb 2023 Gothenburg, Sweden

- Led the main development effort of XR Smart City platform with Unity
- Showcased the Smart City platform in Shenzheng Design Week 2022
- Transformed the company from product design to include UI/UX practice
- Researched sustainability strategy and application of digital twin for smart cities
- Utilized Unity, C# programming, VRTK, Vuforia, Rhino, and Abode Creative Suites

Co-Founder & Chief Designer
LjUs AB

Jun 2019 – Apr 2022 Gothenburg, Sweden

- Co-founded LjUs light, an interactive light therapy device that integrates IoT technology and machine learning for winter depression
- Led the UX/UI design process and designed the user experience journey and conduct the interface design through Figma, created a new virtual experience with AR frameworks

Assistant Designer
ArConnect Studio

Jun 2019 – Sep 2019 Dali, China

MOST PROUD OF

Decision making
Analytical thinking and predictive management of potential risks

Stay hungry, stay foolish
Always humble to learn in the multidisciplinary field to advance innovations

Entrepreneur mindset
Self motivated and strong work ethics

Motivated | Creative | Productive | Team Player | Leader | International

Unity | C# | Python | Rhino | Figma | Adobe Photoshop | Adobe Illustrator | Adobe InDesign | AI Prompt Engineering | Emulate3D | Visual Component | IC.IDO

LANGUAGES

English
Mandarin
Swedish

EDUCATION

PhD candidate. in Production system - Human centric automation
Chalmers Tekniska Högskola

March 2023 – March 2025

- Full paid PhD with 20 % in teaching and department duty

M.S. in Architecture Design & Planning for a Sustainable Future
Chalmers Tekniska Högskola

Sep 2019 – Jun 2021

- Chalmers IPOET Scholarship Awarded for Academic Excellence

B.Arch. in Architecture
Wuhan University

Sep 2014 – Jun 2019