



# Radosław Gierwiało, PhD

Software Developer & Researcher

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### Homepage

https://radoslaw.gierwialo.com

## Employment

Senior Software Developer

since 01.2024

Samsung Poland R&D Center

**Tech Stack:** C++ / WinAPI / WMI / Git / Visual Studio 2022

Senior Backend / Server Developer

04.2023 - 11.2023

Scramjet sp. z o.o.

Responsible for develop asynchronous TCP/IP connection multiplexing interface over HTTP between Python client and node.js STH server (Scramjet Transform Hub); Co-Developer of Proof-of-Concept of Raspberry Pico / Nucleo management via STH with usage of Zephyr RTOS.

**Tech Stack:** Python 3.10 / asyncio / pytest / TCP multiplexing / Embedded C / C++ / Zephyr RTOS / Raspberry Pico / Nucleo STM32 / Git

Python Software Developer & System Engineer 03.2020 - 03.2023

SmartTracking sp. z o. o.

Responsible for camera and system calibration process. Focused on image acquisition, system-level hardware communication via TCP and system management workflow.

**Tech Stack:** Ubuntu / Python 3.8 / numpy / pytest / Git / Bitbucket Pipelines / FLIR cameras / Docker / ansible / bash / NFS / LDAP / 10Gbit network

Researcher & C++ Software Developer

11.2013 - 02.2020

OGX|Optographx - Warsaw Univ. of Technology Research Team

Responsible for development of 3D measurements with structure light methods. Creator of first glasses-free augmented reality system in research team. Finished with PhD defence.

**Tech Stack:** C++11 / OpenGL / OpenCV / Mercurial / FLIR cameras / Visual Studio 2015

Network administrator

02.2013 - 02.2020

Faculty of Mechatronics, WUT

Managing a core faculty network for 1500 end user devices (wired and wireless). Working on 30 managed switches, 10 bare-metal servers to virtualize all network services (LDAP, DNS, DHCP, Postfix etc.)

**Tech stack:** XEN / Ubuntu / HP Aruba / Cisco WLC / routing & NAT & 10Gbit network

## Education

Doctor of Philosophy - Augmented Reality

09.2013 - 07.2020

Warsaw University of Technology

PhD in Mechanical Engineering at Virtual RealityTechniques Division; Thesis: An augmented reality system to support the learning process for liver ablation procedure

Master of Science

02.2012 - 09.2013

Warsaw University of Technology

MSc in Photonics Engineering at Faculty of Mechatronics; Thesis: Implementation of software for processing and analysis of data from holographic microscope

Bachelor of Science in Engineering

10.2008 - 02.2012

Warsaw University of Technology

BScE in Photonics Engineering at Faculty of Mechatronics; Thesis: Review and implementation of threshold algorithms in OGX|Calculation 2D environment.

## Profile Info

Experienced researcher and image processing Python / C++ OpenCV software developer with a demonstrated history of working as network and Linux servers administrator, who likes develop software from scratch to final product.

Skilled in Python C++, OpenCV and TCP/IP issues. Strong in network administration (Linux / Xen / Docker / LXN) with a Master of Science focused in Photonics engineering and PhD in Augmented Reality from Warsaw University of Technology.

## Skills

Software development

Design experiments

Image processing

Scrum

Network admin.

DevOps

## Languages

Polish

English (B2)

## Interests

West Coast Swing dance

Climbing

DIY

IoT