

GRZEGORZ FINKE

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Domicile:
Warsaw, Poland

SUMMARY

Highly skilled and motivated optomechanical engineer with over 12 years of combined experience in both industry and academia. A solid background in applied optics, optomechanical device design and programming, acquired at university, allows me to solve diversified challenges in my professional life. For over 5 years I have been refining my research abilities both independently and within collaborative environments, while honing interpersonal skills through regular communication with clients, subcontractors and suppliers of components used in manufactured devices.

I am experienced in leveraging a diverse array of software tools to advance research and development initiatives. To support and optimize R&D processes I have been using tools like Excel, LabView, Python, Autodesk Inventor, or Zemax. Most recently, I have expanded my interests to include data analysis methodologies, utilizing Python, SQL, or Tableau to extract valuable insights from experimental data.

TECHNICAL SKILLS

- **Optomechanical systems**
Practical knowledge of instrumental optics and optomechanical systems design.
- **Holography and 3D display**
Practical and theoretical knowledge of holography and 3D imaging.
- **Optical and measurement imaging**
Many years of experience in optical imaging systems and measurement systems design.
- **Optical and interferometric systems**
Utilization of optical interferometry in measurement processes.
- **Programming skills**
Labview, Matlab/Octave, Python
- **Data analysis**
Python, SQL, Tableau, Excel
- **3D design**
Autodesk Inventor, Autodesk Vault, SketchUp, Zemax
- **Graphic design**
Adobe Illustrator, CorelDraw, Inkscape
- **Programs supporting work**
MS Office (Excel, Word, Power Point, Skype, Teams), Google Workspace, Mendeley/Elsevier, Gitlab, Zulip.

ADDITIONAL SKILLS

- Fluent communication in English.
- Work in SCRUM methodology.
- Receptive to knowledge and experience sharing.
- Highly motivated for teamwork.
- Experience in international collaboration and in diversified teams.
- Critical thinking and analytical approach to research and engineering problems.
- Orientation to problem solving and work optimization.
- Inquisitive. Desire to broaden knowledge and skills development.
- Capable of conducting research work autonomously showcasing self-reliance and initiative.
- High commitment to assigned tasks.

PROFESSIONAL EXPERIENCE

Sep 2018 – Jan 2024 **Senior physicist in R&D team (laser system development specialist)**

Fluence sp. z o. o. (<https://fluence.technology/pl/>)

- Femtosecond lasers design and assembly (optomechanical and water/air cooling setups).
- Preparation of Quality Assurance documentation.
- Experimental verifications and characterization of designed setups.
- Coordination and supervision of subcontractors and suppliers of mechanical, optical, optomechanical and optoelectronic elements.
- Programming supporting experimental works.
- Installation and service trips.

Apr 2016 – Sep 2018 **Optomechatronic specialist in R&D team**

Astri Polska sp. z o.o.

- Optomechanical setups design and assembly.
- Preparation of technical documentation.
- Coordination and supervision of subcontractors and suppliers of mechanical, optical, optomechanical and optoelectronic elements.
- Collaboration with foreign partners.
- Experimental works with designed setups.
- Work in ISO 8 – 5 cleanroom environments.

ACADEMIC EXPERIENCE

- Design, analysis, and realization of digital holograms capture/reconstruction concepts.
- Experimental work with elements of programming and 3D designs.
- Preparation of scientific publications in Polish and English languages.
- Preparation and presentation of experimental work results at international conferences.
- Collaboration with foreign partners.
- Additional tasks realization in terms of ACT PHAST and inner WUT grants.
- Planning and realization of equipment purchase in public procurement system.

Dec 2013 – Apr 2016 **International R&D team member**

Warsaw University of Technology, Institute of Micromechanics and Photonics

National Science Centre project: „*HoloTrue3D: Multi wavefronts holographic imaging and measurements*”

Realization of contracted research projects in „*Giga Korea Project*”.

Dec 2011 – Dec 2013 **Research project manager**

Warsaw University of Technology, Institute of Micromechanics and Photonics

National Science Centre R&D grant „*Wide viewing angle multi SLM holographic display*”.

Jan 2008 – Jun 2011 **International R&D team member**

Warsaw University of Technology, Institute of Micromechanics and Photonics

EU Project, 7FP “REAL 3D: “*Digital holography for 3D and 4D real-world objects' capture, processing and display*”.

EDUCATION

Sep 2009 – Jun 2017 **PhD studies conducted in English**

Warsaw University of Technology, Institute of Micromechanics and Photonics
Specialization: Photonics engineering

PhD thesis: „*Development and investigation of wide-angle holographic display based on multi spatial light modulators*”.

Supervisor: prof. Małgorzata Kujawińska

Sep 2003 – Dec 2008 **Master of Science in Engineering**

Warsaw University of Technology, Institute of Micromechanics and Photonics
Specialization: Photonics engineering
