

GRZEGORZ FINKE

Phone: +48 602 301 256

E-mail: grzegorz.finke@gmail.com

LikedIn: linkedin.com/in/grzegorz-finke-68aa7175/?locale=en_US

Portfolio: <https://gr3fin.github.io/portfolio/>

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 7 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**, **MATLAB**, 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

Software

- **Data analysis**
Python, SQL, Tableau, Excel
- **Programming skills**
Python, LabVIEW, MATLAB/Octave
- **3D/optical 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.

Hands – on

- **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.

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.

TRAININGS and COURSES

- May 2014 – Sep 2014 **Applied Data Science Program: Leveraging AI for Effective Decision-Making**
MiT, Great Learning
Skills and Tools Covered:
Python & Statistics, Data Analysis & Visualization, Machine Learning, Decision Trees, Time Series, Neural Networks, Recommendation Systems
- Apr 2014 **Excel on the Interview**
Biblio
Skills and Tools Covered:
Data Transformation, Filtering, Sorting, XLOOKUP, Pivot Tables/Charts
- Mar 2014 **Data Analyst Skill Path**
Udemy
Skills and Tools Covered:
Data Analysis with: Excel, SQL, Python
- Mar 2014 **Data Analysis Marathon with Tableau**
GoIT Polska
Skills and Tools Covered:
Tableau Basics, Data Visualization, Dashboards, Filtering, Metrics, Calculation Fields, Custom Formulas.

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 **Optomechatronik 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.

Jan 2008 – Dec 2013 **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".
- National Science Centre R&D grant „Wide viewing angle multi SLM holographic display”.
- National Science Centre project: „ HoloTrue3D: Multi wavefronts holographic imaging and measurements”
- Realization of contracted research projects in „Giga Korea Project”.

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”

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

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