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 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 System

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

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.

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 Sicience in Engineering

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