# **GRZEGORZ FINKE**

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Warsaw, Poland

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

#### **SUMMARY**

Over my 15 years in the engineering field, I have used a wide range of software tools to drive research and development efforts, which sparked my interest in data analysis. Since then, I have developed strong skills in **Python, SQL, Excel**, and **Tableau** to extract valuable insights from complex data sets.

I am passionate about problem-solving, viewing data analysis as a way to uncover hidden patterns. Over the past few months, I have honed my data science skills by attending courses such as the *Applied Data Science Program: Leveraging AI for Effective Decision-Making, Data Analyst Skill Path*, and *Pandas Bootcamp*. These programs have deepened my understanding of advanced data science techniques, including linear and non-linear predictive models, neural networks, recommendation systems, and graph theory.

With 15-years of experience in both academia and industry, I am confident in my ability to acquire and analyze data from multiple sources, build and validate predictive models, and present findings in a clear, concise manner. My strong analytical and critical thinking skills allow me to provide actionable insights and optimize processes, while my communication and interpersonal skills enable me to collaborate effectively with cross-functional teams.

#### **TECHNICAL SKILLS**

- Data analysis
   Python, SQL, Tableau, Excel
- Programming skillsPython, 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.

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 selfreliance and initiative.
- High commitment to assigned tasks.

Hands – on

#### **TRAININGS and COURSES**

# Sep 2024 – Pandas Bootcamp

## currently

## Udemy

Skills and Tools Covered:

EDA, Data Manipulation and Visualization, Feature Engineering, Working with Multiple Data Sets, Time Series, Machine Learning (scikit-learn)

## May – 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

## Mar 2014 Data Analyst Skill Path

## Udemy

Skills and Tools Covered:

Data Analysis with: Excel, SQL (PostgreSQL), 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 degree

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 -

## Master of Sicience in Engineering

## Dec 2008

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