



SKILLS

LightTools 4+ yrs

Solidworks 5+ yrs

Matlab 5+ yrs

Rhino/Grasshopper 2+ yrs

Zemax 2+ yrs

Inventor 2+ yrs

Unreal Engine 2+ yrs

LANGUAGES

Italian Mother tongue

English C1

Japanese N5

CONTACT

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Modena, Italy

GIULIO BURSI

Optics Designer and Lighting Consultant

PROFILE

Physical Engineer with strong theoretical skills and design capabilities.

I enjoy working on technical challenges, whether they are optical problems or products to be developed from scratch.

Customer-oriented and structured method of working, focused on details and maintainability. Even though I work as a consultant, I am highly motivated to work in a team, both comfortable in big companies as in small teams.

WORK EXPERIENCE

Optics Designer and Lighting Consultant
Giulio Bursi Optics

2026 - Now

Let's bring light to your idea!

I design and create the best lighting results for your project, or help your team achieve it.

- Development of new lighting fixtures
- Design of custom optical components
- Prototype testing
- Optical design courses and training

Technologies include:

- LightTools for optical simulations
- Solidworks for 3D modelling
- Matlab for the optics design

Optics and Product designer

Viabizzuno SpA - high end lighting fixtures

2022 - 2025

Senior optics designer in the company, responsible for the development of the light engines of the new products, with the aid of a self-designed Matlab tool to compute the 3D shape of the optical components.

Manages the technical discussion between the company and the clients.

Takes care of training new hires on the topics of photometry and colorimetry.

- Design of new optical components (lenses, reflectors)
- R & D for innovative illumination solutions
- Design from scratch of technical fixtures (wallwashers, asymmetric beams..)
- Laboratory optical testing
- Discussion of the lighting projects with the clients (architects, designers..)
- Internal company photometry training courses

EDUCATION

2017 - 2018

Master's Degree Engineering Physics.

Politecnico di Milano

Development of an electronic system for the characterization of MEMS automotive gyroscopes under vibrations.

In the master thesis a new kind of electronic circuit actuation was proposed. Analysis of this new approach was performed with the help of simulations (Matlab/Simulink, Spice) to find out its limits and advantages over common used schematics.

2012 - 2015

Master's Degree Physics.

Università di Modena e Reggio Emilia

Electron microscopy and diffraction on Diamond-Like Carbon.

2008 - 2012

Bachelor Degree Physics.

Università di Modena e Reggio Emilia

Optimization of the resonant response of microcantilevers by means of micromachining.

Technologies include:

- LightTools for optical simulations
- Solidworks for 3D modelling
- Matlab for the optics design
- Rhino/Grasshopper for the lenses' iterative micro-faceting

Optics designer

Unimore-Ferrari collaboration

2020 - 2021

Responsible for the development of a new projection based infotainment system inside the car.

- R & D on a new kind of device
- Patents and market analysis
- Prototype development

Technologies include:

- Zemax for optical simulations
- Inventor for 3D modeling
- Setup of an optical lab

Hardware designer

CNR IFN Padova

2019 - 2020

Electronics and mechanical design for adaptive optics devices.

- Prototypes realization
- Mechanical solutions study
- PCB and electronics design

Technologies include:

- Zemax for optical simulation
- Inventor for mechanical modelling
- Comsol Multiphysics simulation

High school Teacher

Modena - Various schools

2015 - 2017

Mathematics and Physics classes. Lessons and laboratory experiences.