

Presentation of a first year Ph.D. student

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Ústav konstruování

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VUT v Brně

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ÚSTAV
KONSTRUOVÁNÍ

Content

- **Introduction**
- **Education**
- **Practical experience**
- **My dissertation**
- **Teaching and study**

Introduction

Vedrovice

- 834 citizens, wind pump, museum, pond, tenniscourt, soccer field, wine cellar etc...



Wind pump

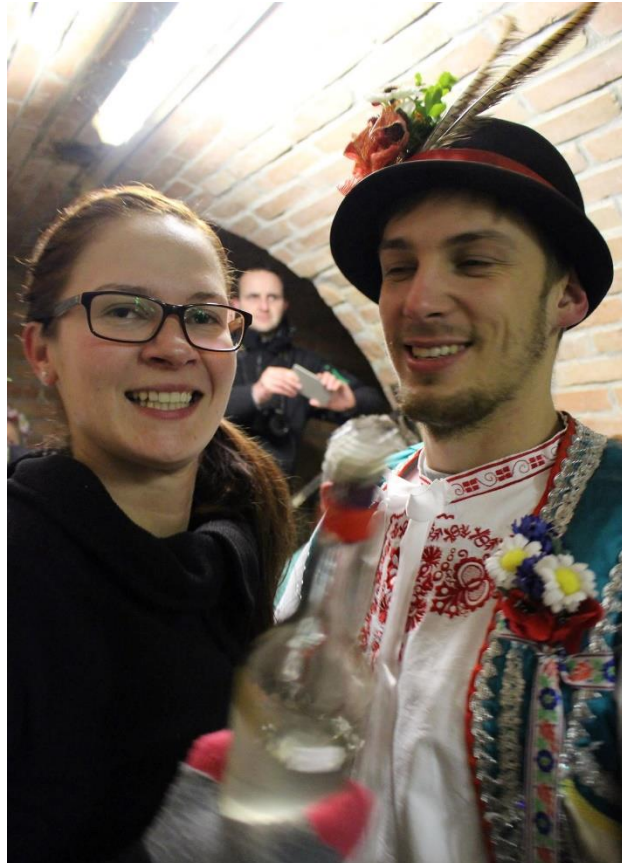


Vedrovice [49°1'15.35"N; 16°22'42.6" E]

Introduction

Hobbies and interests

- Adrenaline sports
- Culture
- Reading
- Willigen skills



Culture



Sport

Education

High school

- Secondary technical school in Moravský krumlov study programme - Technical lyceum (2006/2010)

University

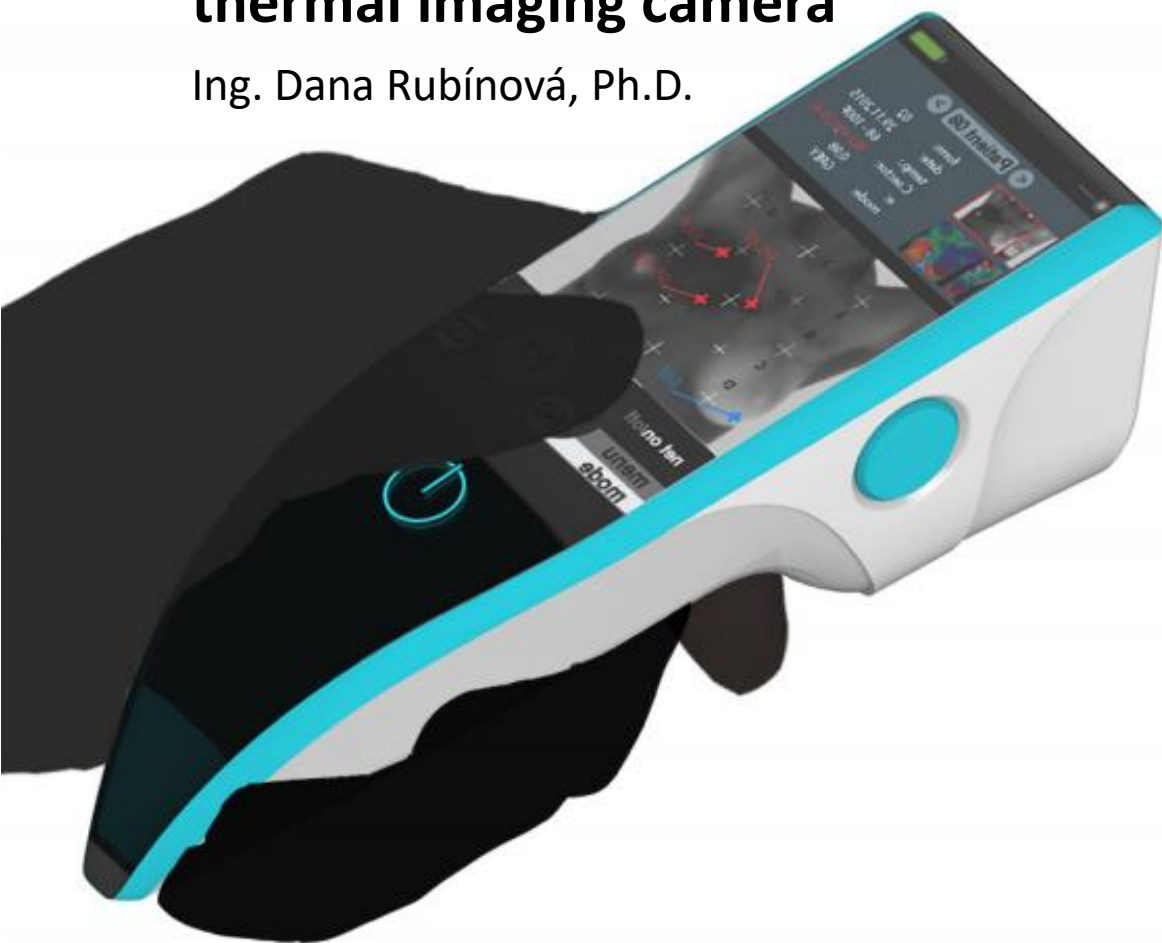
- University of West Bohemia in Plzeň (2010/2011)
Computer modeling in technology - computation and design
- Bachelor's degree programme Industrial Design at Faculty of Mechanical engineering, Brno University of Technology (2011/2015)
- Master's degree programme Industrial Design at Faculty of Mechanical engineering, Brno University of Technology (2015/2017)



Bachelor thesis

Design of the medical thermal imaging camera

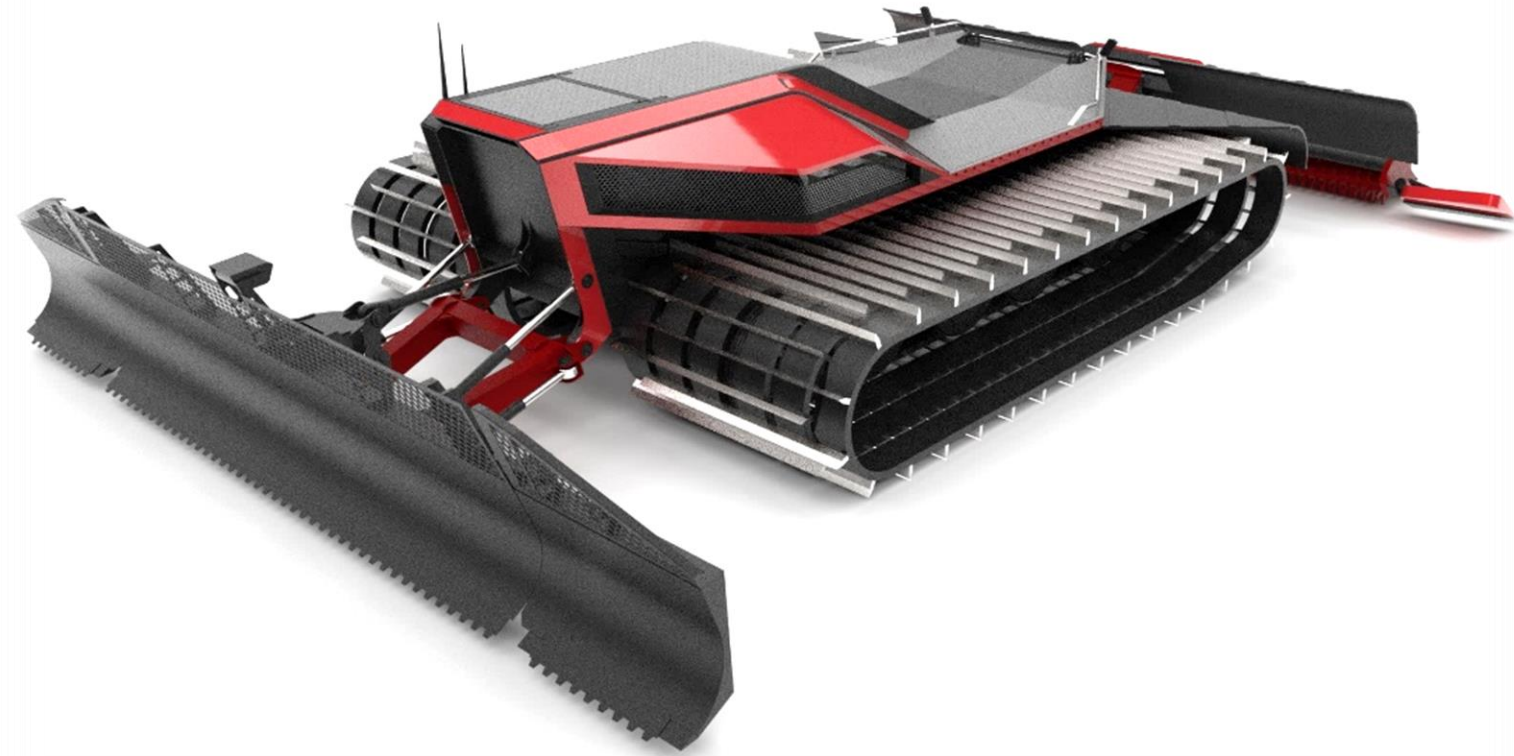
Ing. Dana Rubínová, Ph.D.



Master thesis

Design of an autonomous snow groomer

Ing. David Škaroupka, Ph.D.



Practical experience

Industrial design

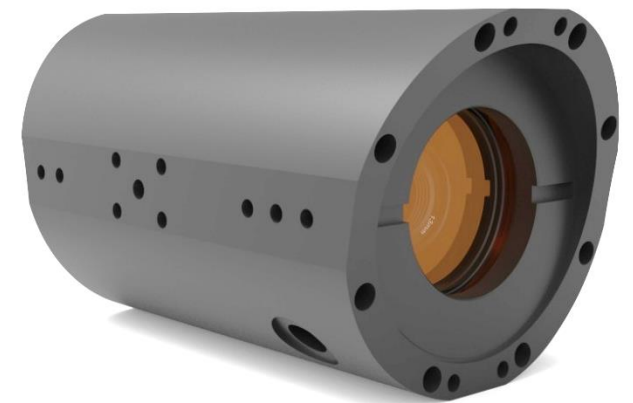
- Quaprotek, a.s.
- VPS elektro, s.r.o.
- DTM Jelinek, s.r.o.
- Workswell, s.r.o.

Electronics

- VPS elektro, s.r.o.
- Siemens, s.r.o.
- Workswell, s.r.o.

Product design

- VPS elektro, s.r.o.
- Workswell, s.r.o.



My dissertation

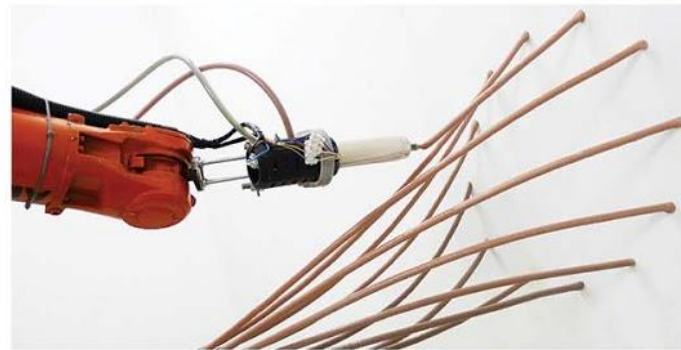
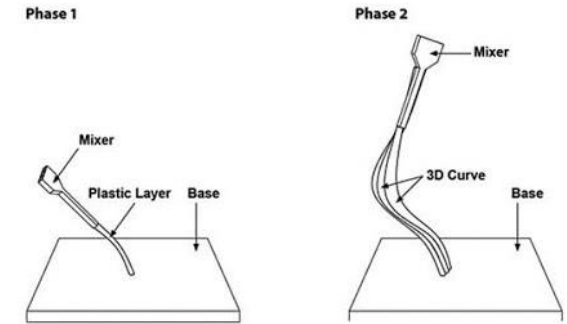
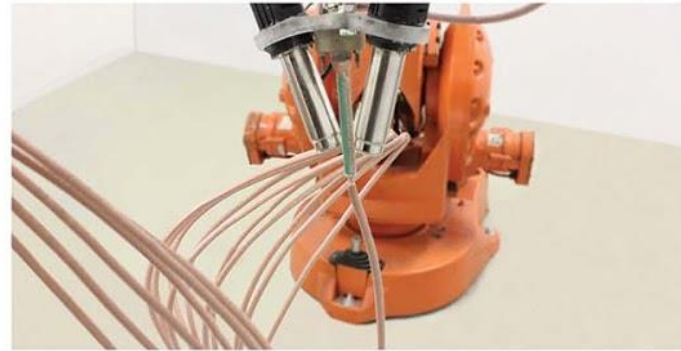
3D print of large-dimensional parts

IMID - Department of REAT

Doc. Ing. David Paloušek, Ph.D.

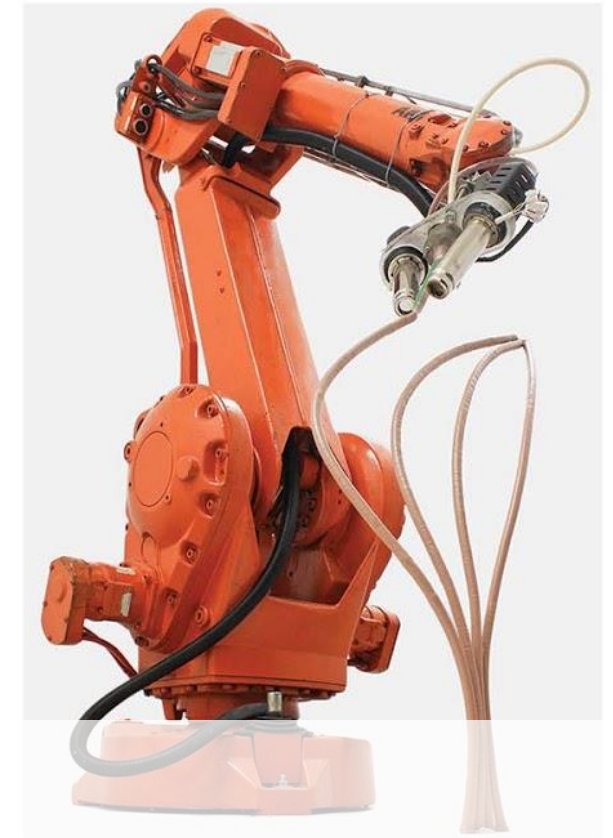
Ing. David Škaroupka, Ph.D.

- Robotic 3D print
- Development of a new production approach of Large-dimensional parts
- Development of a new extrusion head
- Design of a control system
- Finding significant proces parameters



Antigravity 3D printer

IAAC and Joris Laarman Studio



Teaching and study

Teaching

- ZM1 – Parametric Modeling – Inventor, Catia, Rhinoceros
- ZPP – *Polymer Prototypes*
- YPA – *Computer Modelling – Alias Design*
- 1K – *Machine Design Fundamentals*

Study

- 9VPR, 9MOP, 9AJ (basic)
- 9KAR - The special design and applications of mobile robots
- 9KEA - The end-effectors of the industrial robots and their adaptivity

Thank you for your Attention!

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