

Michal Svoboda

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PROFESSIONAL SUMMARY

Electrical engineer with passion for programming, data science and machine learning. 7 years of experience as a process engineer in electronic, automotive and semiconductor industry. Free-time student of computer science at the University of Illinois. Broad skillset in manufacturing technologies, project management and IT.

EXPERIENCE

PROCESS ENGINEER

ETO Sensoric in Nuremberg

11/2017 – Present

- Improved cycle times and reduced scrap of wire bonders and dispensers by optimising the process parameters.
- Proposed and conducted experiments to verify changes and new product designs.
- Worked with internal and external partners on the specifications for new machines.
- Used SQL, Python, VBA and JavaScript to extract and evaluate data from production and test equipment.
- Conducted trainings for operators, wrote work instructions.

PROCESS ENGINEER

ABB Semiconductors in Prague

01/2015 – 10/2017

- Lead a project ending up with a new production line for electronic packaging.
- Worked towards the implementation of a new manufacturing execution system.
- Specified new production equipment (wire bonders, soldering oven, dispensing robots, marking laser).
- Shaped a new product by choosing and testing materials and increasing manufacturability.
- Improved material traceability by programming applications for data acquisition using R, VBA and Python.

TECHNOLOGIST

Prakab in Prague

01/2014 – 12/2014

- Reviewed the technical specifications of customers for products, assessing in-house manufacturability.
- Optimised workplaces using Lean Six Sigma methodology.
- Standardised the machine parameters and production documentation using programming databases.

RESEARCH INTERN

A*STAR in Singapore

06/2013 – 09/2013

- Estimated the potential of reducing indirect emissions of electric vehicles by optimising charging scenarios.
- Visualised GPS data from mobility survey, identified patterns, conducted statistical modelling.

EDUCATION

MSc. COMPUTER SCIENCE

University of Illinois in Urbana-Champaign

01/2021 – Present

- Online degree, pursued in free time, computer graphics, data science.

MSc. ELECTRICAL ENGINEERING

Czech Technical University in Prague

09/2011 – 06/2013

- Power engineering, power electronics, electronic industry; graduated with honours (GPA 1.3).
- Erasmus scholarship for 2 semesters at the Graz University of Technology.

BSc. ELECTRICAL ENGINEERING

Czech Technical University in Prague

09/2011 – 06/2013

- Electrical engineering, programming, physics, mathematics; graduated with honours (GPA 1.5).

SKILLS & TOOLS

Languages

Czech - native
German - working proficiency
English - working proficiency
Slovak - working proficiency
Spanish - beginner

Programming

Python
R
VBA
Matlab
C++
SQL
Tensorflow
Java
OpenCV

Industry

FMEA
Six sigma yellow belt
Wire bonding
Encapsulation
Semiconductor technology
IATF 16969
ISO 26262
SAP

Web technologies

HTML
JavaScript
CSS
PHP
MySQL
MongoDB

Engineering

Autodesk Fusion
AutoCad
3D printing
Minitab
Power semiconductors
Data visualisation
Probability and statistics
Electrical power engineering
Electrical measurements
IoT
Electrical sensors

Soft skills

Project management
Intercultural skills
Innovative spirit