

# Daniel Martinec

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## Summary

Experienced software engineer with strong background in developing robust computer vision systems, including 3D reconstruction and machine learning.

Skilled in technical leadership across product design, manufacturing, and application development (firmware, cloud, and frontend).

Holds 5 patents.

## Experience



### Principal Software Engineer

Glowforge

May 2016 - Dec 2023 (7 years 8 months)

Led computer vision efforts in both app development and hardware manufacturing

\* responsible for developing computer vision algorithms for a 3D laser printer

\* involved in all aspects of the app stack, including firmware, services, and front-end development

\* assisted the physics team with new product design and validation

\* aided the manufacturing team in designing test fixtures and software to ensure that all products met the desired computer vision capabilities

### Computer Vision Consultant

SoundPaper

Sep 2015 - Apr 2016 (8 months)

Developed computer vision algorithms for a dense barcode reader, for startup SoundPaper.



### Senior Researcher

Microsoft

Jul 2010 - Nov 2014 (4 years 5 months)

Developed robust computer vision algorithms for 3D reconstruction in Bing Maps and calibration of various sensors on HoloLens.



### Senior Software Development Engineer

Microsoft

Jul 2008 - Jul 2010 (2 years 1 month)

Developed algorithms for automatic 3D reconstruction from visual and other data and collaborated on a commercial derivative of Photosynth.



### Researcher

Center for Machine Perception

Sep 2004 - Dec 2007 (3 years 4 months)

Spearheaded the development of novel 3D reconstruction algorithms while also serving as a Master's thesis adviser.

## Education



### **Czech Technical University in Prague**

PhD, Computer Vision

2001 - 2008



### **Charles University**

Mgr, Informatics

1995 - 2001

## Skills

Computer Vision • Image Processing • C++ • Python (Programming Language) • Artificial Intelligence  
• Cloud Computing • Kubernetes • Agile Software Development • Camera Calibration • Signal Processing

## Honors & Awards

### **Second place in Computer Vision Contest - ICCV2005**

Oct 2005

The International Conference on Computer Vision organized a location recognition contest named 'Where Am I?'. Our team secured first place in the qualifying round and second place in the finals.