# Jenny Folkesson

### **Data Scientist**

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goo.gl/CxJHcB



/in/jennyfolkesson



jennyfolkesson

# Skills -



# Programming

 $No\ knowledge \longrightarrow Excellent$ 

Python • C++

R • Matlab • LETEX

SQL • Java

# Languages -

English - Fluent

Swedish - Fluent

French - Intermediate

Motivated researcher with ten-plus years of experience in image processing and familiar with all aspects of the product development cycle.

I'm passionate about using technology to improve the way we live and strive to keep learning. I enjoy working independently and in collaborations and believe most problems can be solved with a combination of curiosity and dedication.

## **Experience**

#### 2015 - Now Data Scientist

3Scan

- Develop image processing and machine learning algorithms for analysis of TB-scale knife edge scanning microscopy data processed in a highly distributed environment (AWS). Algorithms include convolutional neural networks for object recognition and segmentation, flatfield and chromatic aberration correction, clustering and classification.
- Main analytics contributor to an image quality control project for detection and quantification of imaging artifacts.
- Work closely with other departments (biology, hardware, optics) to identify and quantify key performance indicators.

#### 2011 - 2015 Senior Scientist

Theranos

- Primary contributor of the fluorescence microscopy image processing software. Methods included image segmentation, stitching, feature extraction and selection and classification. The software passed strict accuracy and precision benchmarks.
- Developed machine vision production code for inspection and validation of device robotics using object detection and tracking, texture detection and change point analysis in or near real time.
- Wrote software related to user interfaces, including methods such as image registration, text detection and optical character recognition.

#### 2008 - 2011 Postdoctoral Researcher

UCSF

- Leading role in a magnetic resonance imaging based pilot study of a potential osteoporosis treatment for Merck. It was the largest longitudinal MRI-based study of the treatment at the time, using statistical analysis to show significant changes in bone parameters over time.
- Developed and evaluated a framework for trabecular bone analysis for osteoporosis research including fuzzy clustering, texture recognition, nonparametric regression, and image registration. Resulting publications showing significantly improved sensitivity and precision compared to previous methods.
- Management and maintenance of laboratory data, in house developed software, and hardware resources.

### **Education**

#### 2004 - 2007 Ph.D. in Computer Science

University of Copenhagen

- Developed one of the first fully automatic cartilage segmentation methods, based on statistical classifiers trained using feature selection of local geometry descriptors. The research resulted in a number of publications, patents and commercially used software.
- Part of the research was performed at the Laboratory for Mathematics in Imaging.
- Close collaboration with with clinicians, biochemists, radiologists and statisticians at Nordic Bioscience for establishment of novel biomarkers that proved to be clinically relevant and increased sensitivity to disease progress.