C-RAD is a global medical device company with headquarters in Uppsala. We develop, produce and sell innovative solutions to healthcare customers. The focus is on patient positioning, monitoring and imaging within radiation therapy. We are market leader in the field of optical patient positioning. C-RAD is a stock listed company at NASDAQ OMX Nordic Exchange. C-RAD group consists of three daughter companies in Sweden and sales offices in the USA, Germany, France and China. C-RAD is ISO 13485 certified. Please read more about C-Rad on www.c-rad.com.

We are currently looking for a master thesis student to integrate and evaluate performance of face recognition methods for patient identification.

Patient identity verification for medical care

30 hp, Master thesis work

Perhaps the most obvious role of facial recognition in the healthcare industry is to ensure the accurate identification of patients seeking medical attention. This form of digital identification could prevent the incidence of imposters seeking care under another person’s name and insurance. Likewise, facial recognition technology is used to prevent the misidentification of patients, wherein the wrong patient receives treatment meant for another patient entirely.

C-RAD want to evaluate face recognition techniques for developing positive patient matching system with a minimum of user/patient intervention. Hence, such a system will need to be robust to correctly match a person at a range of head orientations, while walking, being pulled in a wheelchair or a bed.

You will integrate, train and evaluate a few face recognition methods in a number of predefined healthcare scenarios.

The project will include
- Literature study
- Selection and implementation of face recognition methods
- Selection of clinically relevant scenarios
- Evaluation of the results and suggestion of further improvements
- Writing your thesis that doubles as a comprehensive report on your findings
- Presenting your findings to project managers
Preferred skills & experience
- You have an interest in medical device technology
- You have theoretical knowledge in signal processing and/or image processing
- Experience in C++, C# and .NET application programming is a plus
- Fluent in Swedish or English is mandatory, other language skills are an advantage

Education
Aiming for a master’s degree in Physics, Medical or Computer engineering,

Primary location
Uppsala, Sweden

If this Master thesis is interesting to you, please send us your application. Interviews are being held on a current basis, please send in your application as soon as possible.

Contact person
Daniel Lundgren
Product manager

C-RAD Positioning AB
Sjukhusvägen 12K, SE-753 09 Uppsala, Sweden

daniel.lundgren@c-rad.com
www.c-rad.com