



MTT
Innovation
Incorporated



A
BARCO
Company

Imaging Research Mathematician

About MTT Innovation

MTT Innovation Inc is an R&D branch of Barco, the world's leading provider of imaging solutions for cinema and professional applications. We are developing a novel form of projection that enables High Dynamic Range (HDR) on the big screen. We also serve as a skunkworks lab for Barco, pursuing new opportunities that make business and technology sense. MTT Innovation recently was announced as a winner of the 2018 Lumière Technology Award of the Advanced Imaging Society for our prototype light-steering cinema projector (<https://www.hollywoodreporter.com/behind-screen/dreamworks-animation-ibm-watson-ais-tech-award-winners-1140927>).

Who We Need

We are looking to add an Imaging Research Scientist to our agile and cohesive R&D team (currently about 15 people). Obtaining geometrically and colorimetrically accurate images in real-time with light-steering technology is challenging and computationally expensive. We are always improving our algorithms, and we need a mathematical specialist to support this effort. Furthermore, we have another project in the incubation stage, un-related to projection and display (about which we can't say more yet!) which also presents challenging optimization problems. Depending on your interests, the job could also encompass software development, running demos of prototype hardware, giving talks, and travel.

Our minimum requirements are:

1. PhD in mathematics, theoretical physics, computer science, or related field.
2. Before applying, please read and be prepared to discuss at least the first sections of the following two publications:

Parikh & Boyd, Proximal Algorithms, Foundations and Trend in Optimization, vol. 1, no. 3 (2013) 123-231

Boyd et al., Distributed Optimization and Statistical Learning via the Alternation Direction Method of Multipliers, Foundations and Trends in Machine learning, vol. 3, no. 1 (2010) 1-122

Other skills that will be useful but are not strictly required include knowledge of color science, statistics, machine learning, optics, HDR experience, post-production or VFX experience, Matlab, Numpy/Scipy, CUDA and GPU programming. Super important: that you have a can-do attitude and a collaborative team spirit.

To Apply

Send your resume, with cover letter, directly to Anders.