

Memjet labels Imaging and Color Science

Position Description

Memjet Labels has a need for a full time Image Science Engineer. This position will have ongoing responsibility for image and color science development for Memjet label printers. It will be focused on new product development and customer applications. Key objectives are to provide added value to customers through innovative image processing, color science, and error algorithms, software, and tools.

Objectives:

1. Participate in imaging algorithm design and image pipeline optimization
2. Design and lead development of automatic calibration algorithms including color and alignment calibration.
3. Work with Partners and Customer representatives to give feedback and resolve issues related to print quality. Characterize IQ performance, e.g. system variability, color accuracy, spot color accuracy, dithering artifacts, edge sharpness, etc.
4. Evaluate overall system performance and propose optimization from both mechanical and firmware architectures
5. Create and maintain a specification for image quality, including how to measure overall IQ, black optical density, critical aspects of color, test methods, musts, and wants.
6. Own the process for creating color profiles for various label media and customer media and direct the work of color profile creation.
7. Lead and work with product design teams to improve writing systems capability of existing systems and help with design of new platforms
8. Design color profile paths and integrate it with RIP providers
9. Design and conduct experiments to examine fundamental elements of IQ.
10. Ensure full print system comes together to produce all aspects of print quality, including images, line art, text, and barcodes.
11. Advance the development of print imaging and color management methods used by Memjet Printing technology. e.g. alternative dithering, plane or tone dependent error diffusion, dot ordering, super-pixeling, spatial & temporal dot dispersion, etc.
12. Invent and propose novel architectures to meet emerging or potential needs, such as larger color gamut, spot colors, JPEG compression, higher robustness, greater speed, asymmetric resolutions, etc.

Company Description

Memjet Labels is an independent and exclusive supplier of Memjet printing technologies, including printheads, driver chips, ink, software and reference designs utilizing the technology. The company provides Memjet Technology at the component and subsystem level enabling manufacturers to develop label printing solutions under their own brand.

Required Skills:

1. A masters in computer science, computer engineering or mechanical engineering with 5+ years experience
2. Knowledge of thermal inkjet printing and print quality is a must.
3. Highly experienced in image pipeline and color profiling
4. Familiarity with metrics including optical density, color gamut and accuracy, uniformity, graininess, edge sharpness, etc.
5. Experienced in automatic image calibration algorithm is a must
6. Skilled in Matlab or Python is a must.
7. Knowledge of C/C++, Perl script programming is a plus
8. Knowledge of ink and media interaction such as Bleed, dot gain
9. Knowledge of device modeling algorithms is a plus
10. Knowledgeable in optics and color sensors
11. Experienced in Signal Processing, human perceptual modeling and color science is a must
12. Being able to work in a team
13. Project management and planning.
14. Experienced in design cycles and experiment setup

This role is preliminary and will be adjusted to meet the business needs of MjL as the business grows and expands.

Interested parties can contact
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