

POSITION ANNOUNCEMENT

Job Title: Sr. Software Development Engineer
Job Type: Full time
Location: Boulder, CO, USA preferred but not required

Position Summary

Double Helix Optics, an innovator in 3D imaging technologies, is expanding to additional markets and is looking for an MS/PhD level – or work experience equivalent – Software Development Engineer to join a small and dynamic team expanding the boundaries of 3D imaging technology.

Double Helix Optics utilizes 3D computational optics and image processing algorithms to complement its 3D biomedical and machine vision imaging instrumentation. The candidate filling this position will implement, enhance, optimize, and maintain 3D image processing end-user software. The candidate must be self-motivated, self-directed, and able to function in a small, fast-paced development team.

Come join a great team bringing cutting-edge 3D imaging products to life in real world science and machine vision applications!

Primary Responsibilities

- Plan, design and optimize algorithms for 3D imaging processing, reconstruction and analysis
- Evaluate software for continuous improvement and extensibility
- Evaluate deep learning – primary neural networks – for development and integration into software offering
- Work with software and computational optics engineers to determine requirements for algorithm performance
- Troubleshoot and fix customer issues
- Support and manage software system integration and builds

Qualifications

- Master's degree in Computer Science, Engineering, Math, or equivalent, and 5+ years software development experience
- Strong software architecture, design, implementation and debugging skills
- Experience with C++ and Java development
- Good MATLAB and image processing toolbox experience
- Experience with Intel MKL and IPP coding and optimization preferred
- Experience with Fourier signal processing, GPU programming, and machine learning preferred
- Experience with ImageJ (ImgLib1, ImgLib2) and Micro-Manager coding a plus
- Self-motivated and a solid team player with excellent oral and written communication skills

Send resume and cover letter to scott@doublehelixoptics.com