



AMERICAN GEM SOCIETY
LABORATORIES®

Setting the Highest Standard for Diamond Grading®

Research Analyst & Computational Geometry Software Engineer

AGS Laboratories, a nonprofit diamond grading laboratory, is seeking a Research Analyst & Computational Geometry Software Engineer with strong computational geometry software development skills. If you are seeking a dynamic and challenging position, read on!

This position is located in our Las Vegas, NV office and required hours are 7:00 AM – 3:30 PM, Monday through Friday.

Role: This successful candidate will perform various research and development activities related to the laboratory's cut grade research project. As part of this role, the candidate will also be responsible for software development related to ray tracing, optimization, and math intensive parametric 3D modeling.

Job duties:

- Develop abstract algorithms and write software for systematically generating 3D parametric models 'lifted' from 2D models
- Perform a variety of complex technical activities related to 3D modeling, optimization, and data analysis
- Utilize a variety of tools to generate and maintain large, well organized databases of technical data and 3D models
- Work closely with diamond manufacturers to optimize cuts using a variety of modeling tools and custom software
- Serve as technical support for external clients
- Performs other duties as assigned

About you:

- Balanced combination of creative problem solving, analytical and interpersonal skills
- Highly proficient with 3D geometry, CAD and data analysis
- Strong written and verbal communication skills
- Strong 3D computational geometry software development skills
- Experience with complex algorithm design and math intensive software development
- Proficient with SQL and Excel
- Passion for learning, research, and innovation

Education and Experience:

- BS, MS or PhD degree in Mathematics, Physics, Engineering, Computer Science or related field required
- At least five years of experience with C, C++ and/or C# programming or education equivalent
- No experience with diamond industry is required, but ability and passion to learn is a must

We are a team of passionate, inspired, empowered nonprofit professionals. With teamwork at our core, we make a difference by serving our members and clients to the best of our abilities every day. We believe our people are our greatest assets, so we work to attract and retain employees with our competitive compensation and benefits package, not to mention a great work environment!



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We offer a competitive benefits package, including medical, dental, vision, and life insurance as well as short term and long-term disability and company matched 401(k) contributions.

AGS Laboratories is an equal opportunity workplace. All qualified applicants will receive consideration for employment without regard to, and will not be discriminated against based on age, race, gender, color, religion, national origin, sexual orientation, gender identity, veteran status, disability or any other protected categories.

Salary range \$80,000-\$90,000/annual DOE

Resume to Denise Manfra, Director of Human Resources dmanfra@agslab.com