



STUDENT PROGRAMMER - <https://jobcenter.wisc.edu/jobs/detail/55198>

The Vocal Tract Development Laboratory (VTLab), at the Waisman Center is seeking an undergraduate or graduate student to hire as a student programmer for the summer. The individual will provide programming, data maintenance, analysis, and management support for several ongoing medical image-related projects in the VTLab.

Applicants must be able to work at least 10-15 hours per week. The hours will vary each week and a schedule will be determined upon hire. This is a summer position, with possible extension into the fall semester pending performance and funding availability.

Position Summary:

- Program, improve and debug new or existing scripts/pipelines written in MATLAB and shell scripting.
- Ability to translate information from subject matter into code, writings, and lab documentations.
- Perform 3D anatomical structures modeling, extraction, quantification and inspection using medical image visualization and processing software or other in-house image processing scripts.
- Assist researchers in the planning and development of new research protocols and analyses, including reviewing literature for related research techniques and compile findings to present to other lab members.
- Assist in other lab duties such as preparing data for analysis, routine backup, server troubleshooting and other data maintenance tasks.

Required Skills:

- Ability to program in MATLAB and shell scripts.
- Experience with Linux Operating System, SQL and Microsoft Access Database.
- Excellent working knowledge of Microsoft Office and Adobe Illustrator.
- Knowledge of graph theory, analytic geometry and matrix modification.
- Strong communication skills, both oral and written.
- Ability to work in groups and also independently with minimal supervision.
- Ability to multitask and meet deadlines.

Preferred Skills:

- Ability to program in C/C++, HTML/CSS, VBA or Python.
- Knowledge in CT/MRI image processing, image-guided intervention and 3D reconstruction.
- Knowledge of linear optimization.
- Working knowledge of producing technical documentation and managing websites.
- Demonstrated ability to provide programming and other miscellaneous IT support.
- Prior experience in a quantitative discipline is a plus.

The minimum starting rate is \$10.00 per hour. **Applicants experience and skills will be considered when determining the hourly rate.**

The ideal candidate will be working towards a degree in computer science/mathematics/statistics or a closely related field, with strong organization skills and highly self-motivated and enthusiastic in learning new concepts. Applicants with a strong interest in medical image processing and quantification of anatomical-based multidimensional growth are encouraged to apply. Applicants that attend an institution other than the University of Wisconsin-Madison will be required to provide proof of enrollment prior to being hired.

To apply, please email your cover letter and resume to Melissa Henning, Waisman Center Human Resources at melissa.henning@wisc.edu. **Please address your email or cover letter to Principal Investigator, Dr. Houri K. Vorperian, and reference "VTLab Student Programmer Position" in your subject line.**

We encourage you to learn about our lab at <http://www.waisman.wisc.edu/vocal>.

This position description is also posted at <https://jobcenter.wisc.edu/jobs/detail/55198>.