

## Job Posting:175117 - Position: W26 Applied 3D Reconstruction & Medical Imaging 175117

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|-------------------------|--------------------------|
| Co-op Work Term Posted: | 2026 - Winter            |
| App Deadline            | 11/19/2025 09:00 AM      |
| Application Method:     | Through Employer Website |
| Posting Goes Live:      | 11/05/2025 02:47 PM      |
| Job Posting Status:     | Approved                 |

### ORGANIZATION INFORMATION

|                        |                                      |
|------------------------|--------------------------------------|
| Organization           | MetaOptima                           |
| Address Line 1         | Suite 1050, 1185 West Georgia Street |
| City                   | Vancouver                            |
| Postal Code / Zip Code | V6E 4E6                              |
| Province / State       | BC                                   |
| Country                | Canada                               |

### JOB POSTING INFORMATION

|                   |  |
|-------------------|--|
| Placement Term    | 2026 - Winter  |
| <b> Job Title <b> | W26 Applied 3D Reconstruction & Medical Imaging 175117 |
| Position Type     | Co-op Position   |
| Job Location      | Vancouver, BC  |
| Country           | Canada   |
| Duration          | 4 or 8 months  |
| Salary Currency   | CAD  |
| Salary            | 18.0 per hour for 0 Major List                         |
| Salary Range \$   | \$18-30/hr   |
| Job Description   |  |

Join us in building technology that could impact millions of patients and doctors worldwide. We're inviting Engineering and CS students and faculty to collaborate on projects at the intersection of photogrammetry, 3D vision, and medical imaging, advancing tools that directly support global skin cancer and dermatology care.

#### Why Get Involved

This is more than research, it's meaningful innovation. Your contributions could shape how skin cancer and other dermatological conditions are detected, tracked, and treated across the globe. Perfect for undergrad, Masters and PhD directed studies, projects, or research credit, as well as co-op, part-time, and full-time opportunities. You'll:

- Rapidly prototype and evaluate in real-world contexts.
- Develop algorithms with tangible clinical impact.
- Push the boundaries of 3D vision and AI in healthcare.
- Active project tracks
- Template fitting for photogrammetry correction
- Align reconstructed meshes to canonical templates to correct scale/drift, fill holes, and denoise multi-view geometry.
- Hybrid reconstruction pipeline (Photogrammetry + NeRF/Gaussian splatting → mesh)
- Build a pipeline that fuses image-based methods with neural fields and exports clean, watertight, metrically accurate surfaces ready for clinical measurement..
- Medical segmentation & longitudinal analytics

- Robust 3D segmentation; surface/volume measurement; registration-based tracking; change detection and quantification over time. Non-rigid temporal tracking (deformable ICP + differentiable rendering) for patient-specific change maps and per-vertex growth/shrinkage curves.
- Model manipulation for plastic (non-rigid) operations
- Constraint-driven mesh/volume editing (ARAP/elastic energy), topology-safe remeshing, smoothing, and Boolean ops-while preserving geometric quality and volume for surgical planning and patient-tailored edits.

## Job Requirements

### Who We're Looking For

- Proficient in Python/C++
- Experience in computer vision, graphics, or ML
- Passion for rigorous, clinically relevant evaluation

**Citizenship Requirement** N/A

## APPLICATION INFORMATION

**Application Procedure** Through Employer Website

**Cover Letter Required?** Optional

**Address Cover Letter to** Hiring Manager

### Special Application Instructions

Attach your resume and send a brief note with your background, interests, and availability to [hr@metaoptima.com](mailto:hr@metaoptima.com), with the subject line "OptimaScan 3D Projects." Immediate positions are open and rolling start dates available.

**Please click the "I intend to apply to this position" button on SCOPE and also submit your application via the employer's website.** Applications are accepted on a rolling basis and the posting may be expired at any time by the employer as submissions are received. Students should submit their applications as soon as they are ready.