**Institute:** **ISSS**

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| **Name:** | Carson |
| **Email:** | Vogt |
| **Supervisor’s name:** | Alex Belyaev |
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| **Using Robots for Adaptive Light Field Sampling** | |
| *Light fields are a relatively novel method of rendering realistic scenes from real images. With the advent of virtual reality, faster processors, and larger image sensors, their usefulness has become more apparent and applicable, though the method for collection has remained tedious and generally fixed both physically and through available parameterizations. We present a method for sampling that does not require a fixed structure or predefined parameterization. Instead, a mobile robotic system is used for collection and based on this, an appropriate parameterization is chosen for the given robotic platform and subject. Using this method, a subject's light field can be collected efficiently and densely, allowing as well for experiments in sparse sampling and image interpolation post collection. This method also points to future work in which novel light field-defining parameterizations may be developed.* | |