

## **Automatic Microlensing Modeling System Using GPU, Python, and APM**

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**Abstract:** During the 2011 Bulge season, MOA and OGLE detected about 500 and 1600 events, respectively, and more than 120 anomalous events were observed among them. For the real time modeling of a large number of events, it requires an optimized system that can minimize the human interaction and maximize the computational efficiency. A GPU server that enables dramatic increases in computing performance is helpful for the microlensing modeling. We here introduce our automatic microlensing modeling system using GPU, Python, and APM. The automatic system consists of a GPU server and a web server, in which the GPU server uses the Python that allows the automatic and efficient operation through the interaction with the web server that is made of APM (Apache, PHP, and MySQL).