Python Multithreading: Speed up your Scripts 1000% (Geocoding Example)

Ben Bond - City of Huntington

10:15 - 11:00 am

Bio:

Ben Bond - Ben has been working for the city of Huntington for the past four years. He has a masters in GIS from Penn State. He leads the IGIC Developer Support group and currently serve as the President of the Northeast Indiana Geospatial Information Community (NIGIC).

Abstract:

Python is not internally thread safe and utilizes a global interpreter lock (GIL) to synchronize code execution. The GIL restricts python to a single thread on a single core preventing sequential scripts from utilizing the full processing power of modern multicore computers. I/O and CPU bound processes are common in GIS processing and can drastically benefit from concurrency. Examples include large file transfers, geocoding, or raster processing. This talk will cover utilizing a web based geocoder and concurrency to quickly convert a list of addresses to GPS coordinates.