



# **Dr. Victor Pankratius**

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# Computer-Aided Discovery

<http://doi.ieeecomputersociety.org/10.1109/MIS.2016.60>

Discovery and Insight Generation

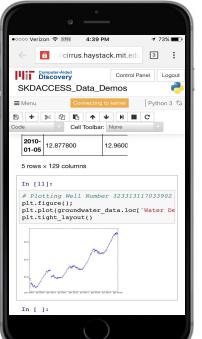
Data Exploration, Analysis, Mining

Data

Signals

Big Data / Real-World Phenomena

Mobile Data Collection & Processing

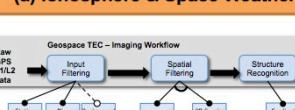


Parallel Computing, Cloud

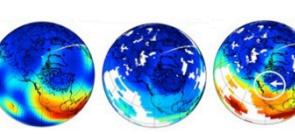


## Case Study Examples

### (a) Ionosphere & Space Weather



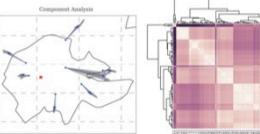
Variants of ionospheric feature models



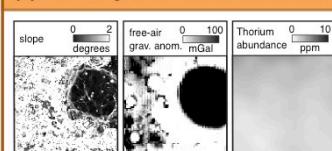
### (b) Geoscience / Volcanics



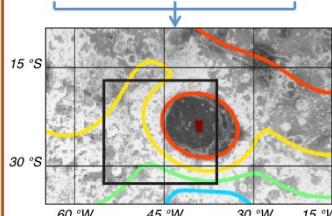
Variants of earth deformation models



### (c) Planetary Science / Site Selection

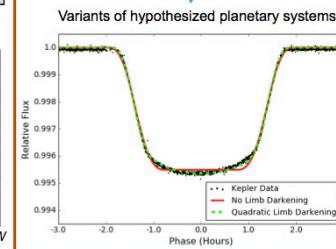


Variants of combined site selection models



### (d) Astronomy / Exoplanets

Kepler Space Telescope



### (e) Groundwater Studies

