

# Capability Statement



## FIELDS (Fellowships and Internships in Large Data Sets)

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### Core Competencies

The UCR FIELDS program educates the next generation of scientists and engineers in large-scale data analysis and visualization; our affiliated Big Data and Visualizations Lab develops proof of concept research, prototype analysis and data mining solutions that meet client specifications; and our online Master's degree in Data Science educates leaders with analytical and management skills needed to produce value from the enormous amounts of data we generate today.

- FIELDS provides education or research internships and fellowships from high school to postdoctoral levels.
- The MIP lab specializes in scientific visualizations, data mining techniques for multidimensional datasets, as well as fast data exploration and analysis on distributed architectures for a variety of text and binary applications.
- Contributing research staff and faculty from Computer Science, Electrical and Computer Engineering, Physics & Astronomy, Statistics expands our ability to produce a wide variety of education & training, research, development and other services to meet our client's needs. Contact us for a consultation.
- Astro/Physics research areas include condensed matter physics, nanoscale materials and electronic device physics, galaxy formation and evolution, computational astrophysics, dark matter and observational cosmology.
- Computer science and engineering research areas include computer architecture, embedded systems, networks, controls and robotics, intelligent systems, and communications and signal processing.
- Online Master's degree in Data Science for graduates and professionals in industry or government agencies.

### Current and Past Performance

- FIELDS is funded by NASA MIRO program in partnership with the Jet Propulsion Laboratory, including several sections and the Center for Data Science and Technology, to provide educational internships, fellowships and research for students and Postdoctoral Scholars.
- UCR engineering departments have collaborated with Lockheed Martin to evaluate technologies for machine recognition of activities in video streams and thermoelectric properties of lanthanum and tellurium materials.
- Other UCR collaborators include industry leaders like Cadence Design Systems, Aircraft Braking Systems, BAE Systems, GEM Power, Samsung Electronics, Intel, CISCO and many others.

### Differentiators

- UCR is both a Hispanic Serving Institution and a RU/VH (Research University, Very High research activity).
- FIELDS partners with NASA's Jet Propulsion Laboratory on several education and research projects.
- Our robust programs provide Data Science research and education experiences at all education and career levels.

### Pertinent Codes

Commercial and Government Entity (CAGE) Code: 4W611

Contractor Establishment Code (CEC): 62-870-752D

Data Universal Numbering System (DUNS) Number: 62-779-7426

DHHS-PMS PIN: 6J62

Federal Interagency Committee on Educational Institutions (FICE) Code: 001316-9

NIFA Automated Standard Application for Payments (ASAP) Recipient ID Number: 0623505

North American Industry Classification System (NAICS) Code: 611310

UCRJ-1 Visa Designation: P-1-3122