

2018 Opportunities to Work and Study in Food, Energy, and Water Systems at Northern Arizona University

Dr. Benjamin Ruddell is recruiting for several student and staff positions for hiring in 2018. Some of these positions have flexible duty locations and are associated with the NSF-funded FEWSION project (<http://fewsion.us>). Most of these positions will be based in part or in whole out of the FEWSION project office at Northern Arizona University in Flagstaff, Arizona. All of these positions require strong motivation, excellent programming and scientific English communication skills, and the ability to work effectively in an interdisciplinary project team. Inquires should be directed personally to Dr. Ruddell.

Topics include:

- Food, Energy, and Water systems
- Complex systems and networks
- Hydrology and Water Resources
- Resilience, Sustainability, and Security
- Informatics and Data Science
- Urban systems and infrastructure
- Citizen science

Life at NAU and in Flagstaff:

- Northern Arizona University is a world class research community for earth science, ecology, climate science, and now informatics, among other disciplines.
- Flagstaff is a top small college town for quality of life.
- Flagstaff has some of the best weather in the U.S., with its southern latitude and 7000' high elevation.
- Flagstaff has a great ski resort.
- Flagstaff is less than an hour from the world-class outdoor destinations in the Grand Canyon and Sedona, and 2-3 hours from the winter sports and entertainment venues of Phoenix and Las Vegas; both Alpine and Sonoran Desert weather are less than an hour away.
- Flagstaff is a "dark sky city" and a hotspot for astronomy
- Read More

Student Opportunities

Northern Arizona University's School of Informatics, Computing, and Cyber

Systems (SICCS, <http://nau.edu/siccs/>) is recruiting **Ph.D. students** with graduate research fellowships supported by the FEWSION project. Study Food, Water, and Energy Systems resilience in an interdisciplinary Informatics graduate program, alongside the FEWSION project office and scientists, in beautiful Flagstaff, Arizona! Allied graduate programs and centers at NAU provide additional collaborative and degree opportunities, including the Center for Ecosystem Science and Society (EcoSS, <http://ecoss.nau.edu/>) and the School of Earth Sciences and Environmental Sustainability (SESES, <http://nau.edu/cefns/natsci/seses/>). Women and minorities are particularly encouraged to apply. Self-funded **Professional M.S. students** are also welcome. Contact the FEWSION Project Office at FEWSION@nau.edu with inquiries. The final application deadline is in mid-January, but you should inquire and apply

immediately for full consideration on fellowship and teaching assistantship opportunities. See the SICCS website for more information (<http://nau.edu/SICCS/Academics/PhD-INF/>). We seek prospective **Ph.D. students** to work with **Dr. Nick McKay and Dr. Ben Ruddell** to pursue an interdisciplinary Ph.D. that blends paleoclimatology and sustainability research. This project focuses on investigating **how modern food, water and economic infrastructure would cope with severe prehistoric droughts in the southwest US**, which were both more extreme and longer-lived than anything observed during the past 200 years. Prospective students will be integrated with both the Paleoclimate Dynamics Laboratory and the Complex Systems Informatics Laboratory at NAU, as well as the larger FEWSION project, which is mapping the interconnectivity between food, energy and water, and their responses to shocks and stresses, for the United States.

Staff Opportunities

The **FEWSION Project Office at Northern Arizona University** (Flagstaff, AZ), in partnership with the **Desert Research Institute** (Reno, NV) and the **National Renewable Energy Laboratory** (NREL, Golden, CO) is informally seeking to hire **one researcher at the PhD student, Postdoctoral, or Professional rank** to lead a **nationally scoped PLEXOS modeling study of the U.S. power grid**. The duty location and rank have not yet been determined and may be flexible, but the position will likely involve travel to NREL for some period of time. Potentially interested researchers should contact the FEWSION project's Director, Ben Ruddell, with informal inquiries, at benjamin.ruddell (at) nau.edu. A formal job description may be released in early 2018, and the position will be likely be based out of DRI or NAU; there is no application deadline at this time.

FEWSION is seeking to fill a **Postdoctoral** position based out of the project office at Northern Arizona University (NAU) in beautiful Flagstaff, Arizona, with temporary duty locations possibly including Reno, NV (DRI) and Tempe, AZ (ASU). The position is open immediately until filled. Candidates should demonstrate strong scientific writing, quantitative analysis, and programming skills. Women, minorities, veterans and individuals with disabilities are encouraged to apply; NAU is an AA/EEO/MWDV employer. A background check is required. Direct inquiries to Ben Ruddell at benjamin.ruddell (at) nau.edu. Salary Range: \$45,000 - \$55,000 (postdoctoral) Depending Upon Qualifications, Job ID: 603514, visit <https://nau.edu/Human-Resources/Careers/Staff-Welcome-Page/>

FEWSION is seeking a **Data Scientist** to take a leadership role on the **construction and curation of core FEWSION project datasets**, and on their documentation and accessibility via data models and API's. The position is based out of the FEWSION project office at Northern Arizona University (NAU) in beautiful Flagstaff, Arizona. The position is open immediately until filled. Women, minorities, veterans and individuals with disabilities are encouraged to apply; NAU is an AA/EEO/MWDV employer. A background check is required. Direct inquiries to Ben Ruddell at benjamin.ruddell (at) nau.edu. Salary Range: \$41,000 - \$64,000 (grade 52) Depending Upon Qualifications, Job ID: 603516, visit <https://nau.edu/Human-Resources/Careers/Staff-Welcome-Page/>

PLACE4FEWS is a citizen science project that is extending FEWSION to map and study local community food, energy, and water critical infrastructures. FEWSION is seeking a **Senior Systems Programmer to lead the integration of FEWSION data with critical infrastructure software transportation models**, including models developed at the national laboratories. The position is based out of the FEWSION project office at Northern Arizona University (NAU) in beautiful Flagstaff, Arizona. The position is open immediately until filled. Women, minorities,

veterans and individuals with disabilities are encouraged to apply; NAU is an AA/EEO/MWDV employer. A background check is required. Direct inquiries to Ben Ruddell at benjamin.ruddell (at) nau.edu. Salary Range: \$69,000-\$88,000 (grade 66) Depending Upon Qualifications, Job ID: 603515, visit <https://nau.edu/Human-Resources/Careers/Staff-Welcome-Page/>

Faculty Sabbatical, EPSCoR, and Fulbright Fellows

- **Junior Faculty from US EPSCoR States** are eligible to apply for the Research Fellows program, funding up to 6 months of collaboration at a FEWSION partner institution.
- **Fulbright Scholars from non-US countries** are invited to study with a FEWSION partner.
- **Faculty on Sabbatical** are invited to study with a FEWSION partner.