JAMES RUSSELL

SCIENTIST/METEOROLOGIST

PROFILE

Atmospheric scientist with 10+ years of experience in data analysis, forecasting, training, and communication of complex atmospheric science phenomena and data. Experienced project and program manager with a record of delivering and communicating atmospheric science research and training products.

EXPERIENCE

SCIENTIST III

The COMET Program, UCAR | Jan 2022 – Current

Lead teams of scientists, designers, developers, and subject matter experts to design and build various online and in-person learning and training products for NOAA and other sponsors. Topics include fire weather, hydrology, operational meteorology (including precipitation products), and long-term forecasting.

Manage hydrology, ocean service, and tropical meteorology training programs. Coordinate and build relationships with employees, customers, sponsors, and partners to ensure timely and on-budget implementation of projects. Communicate these programs to technical and non-technical audiences.

Develop and modernize the program's Python-based data gathering and visualization tools for weather forecast products. This includes visualizations of models (GFS, HRRR, etc.), satellite products (GOES), and surface and upper air observations.

RESEARCH ASSISTANT PROFESSOR/RESEARCH ASSOCIATE

University of Utah | Jan 2019 – Jun 2022

Worked with corporate, university, and federal customers, partners, and sponsors to conduct research in tropical, convective, aerosol, and aviation meteorology. Constructed and disseminated a database of NASA-observed precipitation systems. Performed statistical data analysis of large meteorological datasets.

Planned, led, and performed observational work for NASA field campaigns. Forecasted for flight and observation operations.

Wrote proposals for and managed federal research grants from NSF, NASA, and DOE. Managed and mentored research group. Written and verbal communication of scientific content to non-technical and scientific audiences, as well as private stakeholders.

GRADUATE RESEARCH AND TEACHING ASSISTANT

North Carolina State University | Jan 2015 – Dec 2018

Ran experiments with the Weather Research and Forecasting (WRF) model. Analyzed data to solve tropical meteorology problems. Received awards for written and verbal communication of technical scientific content at AMS conferences.

GRADUATE RESEARCH AND TEACHING ASSISTANT

University of Oklahoma | Aug 2012 – Dec 2014

Performed statistical data analysis of Antarctic dropsonde observations and Weather Research and Forecasting (WRF) model output. Written and verbal communication of technical scientific content to scientific and non-technical audiences.

CONTACT

jmsrssll11@gmail.com

(405) 437-8959

EDUCATION

NORTH CAROLINA STATE UNIVERSITY, 2018

Ph.D. Atmospheric Science

UNIVERSITY OF OKLAHOMA, 2014

M.S. Meteorology

UNIVERSITY OF READING, UK, 2012

MMet Meteorology

SKILLS

Data analysis/research of large and complex meteorological datasets

Python, MATLAB, Fortran

Weather Research and Forecasting (WRF) model

Weather forecasting

Program and project management

Weather and science communication

LINKS

LinkedIn

Google Scholar