Faculty Member Contact Information

Name	Yadong Wang
Contact Info	
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Campus Box	1801
Department	Electrical and Computer Engineering

1 Funded, 1 Unfunded URCA Assistant

	This position is **ONLY** open to students who have declared a major in this discipline.	M
	This project deals with social justice issues.	
	This project deals with sustainability (green) issues.	
	This project deals with human health and wellness issues.	
	This project deals with community outreach.	
	This mentor's project is interdisciplinary in nature.	

Are you willing to work with students from outside of your discipline? If yes, which other disciplines?

No

How many hours per week will your student(s) be required to work in this position?
(Minimum is 6 hours per week; typical is 9)

9

Will it be possible for your student(s) to earn course credit?

Location of research/creative activities:

EB3047

Brief description of the nature of the research/creative activity?

The project title is " radar echoes classification with an artificial intelligence method with dual-polarization radar". In this project, a novel radar classification algorithm will be developed and tested. This algorithm will use Doppler Weather radar data to classify radar echoes in to different types, including weather, clutter, noise, and anomalous propagation. The whole project involves radar signal processing, artificial intelligence algorithm development, data management. Through closely working with scientists from NOAA, and CWA (Central Weather Administration, Taiwan), URCA students will get the opportunity to explore the cutting edge technologies in weather radar, AI, and computer coding.

Brief description of student responsibilities?

Students are responsible in collecting and processing radar data, developing the classification algorithm, and testing/validating the developed source codes.

URCA Assistant positions are designed to provide students with *research or creative activities* experience. As such, there should be measurable, appropriate outcome goals. What exactly should your student(s) have learned by the end of this experience?

fundamental radar signal processing knowledge, fundamental AI technologies, coding skill

Requirements of Students

If the position(s) require students to be available at certain times each week (as opposed to them being able to set their own hours) please indicate all required days and times:

the working time flexible

If the location of the research/creative activities involves off campus work, must students provide their own transportation?

No

Must students have taken any prerequisite classes? Please list classes and preferred grades:

ECE351, ECE352

Other requirements or notes to applicants:

basic coding skill. Familiar with at least one of the computer languages: Matlab, Python, Java, C/C++