

## DEPARTMENT OF THE AIR FORCE AIR FORCE RESEARCH LABORATORY WRIGHT-PATTERSON AIR FORCE BASE OHIO

Dear Birsen,

The Air Force Research Laboratory will again sponsor summer students and visiting faculty to join our research team as a part of the Autonomy Technology Research (ATR) Center summer program. Last summer we successfully engineered a virtual internship, and we are planning and hoping that we can have a hybrid internship next summer where the mentor and intern choose whether on-site or virtual better suits their needs. We would like to enlist your help in identifying outstanding undergraduate and graduate students who would like to be considered for these positions. I really appreciate the students that you vectored our way in the past and look forward to future collaboration. Please provide the link below to deserving students.

Both graduate and undergraduate students will work with an Air Force mentor on projects supporting the Sensors Directorate mission to process and exploit sensor data for object detection, tracking, and recognition. Project areas include:

Multi-source Fusion	Compressive Sensing
Machine Learning / Deep Learning	Neural Networks
High Performance Computing	Radar Feature Analysis
Synthetic Aperture Radar: Multi-static Radar	Wide Angle Signature Analysis
3D Reconstruction	Radar Target Detection
3D Ladar Imaging	Sparse and Low Rank Regularization
Narrow Band Imaging	Advanced SAR Image Formation
Image Registration	Synthetic Aperture Ladar
Overcomplete Dictionaries	Target Tracking
Manifold learning	Pattern of Life Analysis

The ATR Center offers competitive pay, travel costs, and summer accommodations to top students. US citizenship is required. Students will work at Wright Patterson Air Force Base and nearby Wright State University. We ask that you contact [insert contact] if you have questions about the summer program or wish to recommend specific students. This link: <u>https://www.wright.edu/autonomy-technology-research-center</u> describes the program and gives the students guidance on how to apply. We hope you will pass it along to top students you feel would be a good match.

Thank you for your consideration, and we hope to hear from you soon.

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