What is the AFRL ATR Center Summer Program?

The AFRL ATR Center Summer Program is a collaborative research experience for university professors, students, industry, and government to work together to solve challenging Air Force problems in sensor processing and exploitation, including object detection, tracking and recognition. Students work with an Air Force mentor at Wright Patterson Air Force Base or nearby Wright State University, and have access to outstanding computing resources, measurement and modeling tools, and data.

How will I benefit from the ATR Center Summer Program?

Students at all levels undertake well-planned projects that extend and apply their technical skills. They interact with other students, faculty, and Air Force mentors to improve communication skills through presentations and documentation. Their summer accomplishments enhance their education and provide relevant technical experience for future work.

How can I participate?

Please send your resume and unofficial transcript to Dr. Chris Paulson by January 29, 2016 for consideration and the best possible match with a mentor. Include relevant course work, prior and current projects, and technical work experience.

[Email: Christopher.paulson.4@us.af.mil]
### Previous research topics areas
- Deep Learning
- Machine Learning
- High Performance Computing
- Synthetic Aperture Radar
- Laser Vibrometry
- Narrow Band Imaging
- Image Registration
- Overcomplete Dictionaries
- Manifold learning
- Compressive Sensing
- Neural Networks
- Radar Feature Analysis
- Wide Angle Signature Analysis
- Radar Target Detection
- Sparse and Low Rank Regularization
- Advanced SAR Image Formation
- Synthetic Aperture Ladar
- Target Tracking

### Compensation
- Competitive pay
- Free housing
- Travel to and from Dayton
- Use of WSU gym facilities

### What will you do?
- Measurements and data collection
- Experimentation and results analysis
- Algorithm development and implementation
- Generation of synthetic data
- Object and scene modeling

### Organized activities for ATR Center participants
- Seminars, tours of AFRL labs and the National Museum of the US Air Force
- Day trips to amusement parks, canoeing, tubing, hiking, and caving
- Local events including Celtic Fest and Dayton Air Show
- Movie nights and potluck suppers
- Ultimate Frisbee, soccer, and laser tag

### Previous collaborators
- The Ohio State University
- Wright State University
- University of Florida
- University of Michigan
- University of Illinois
- Rensselaer Polytechnic Institute
- Arizona State University
- University of Cincinnati
- Colorado State University
- City College of New York
- MIT
- North Carolina State University
- University of Notre Dame
- University of California-Berkeley
- Purdue
- University of Minnesota
- Rochester Institute of Technology
- Oberlin College
- Penn State