UNNC – SIAT Doctoral Training Partnership

It's essential that you have contacted the UNNC and SIAT supervisors of the PhD topics (below) before submitting an application.

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Potential PhD topics

PhD topic	**Additive manufacturing and its application in the field of medicine**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

SIAT Supe

SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Biomaterials by Additive manufacturing**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	**Mg Mn based 3D printing biomaterials**
Contact points	
PhD topic	**Combining Deep Learning and Ontology Reasoning for Medical Image Semantic Segmentation**
SIAT Supervisor	
UNNC Supervisor(s)	

Short introduction & description of PhD project	
Contact points	
PhD topic	**Computer-Aided Drug Design Based on Machine Learning**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points	
PhD topic	**Deep learning-based method for phenotype prediction with multi-modal features and interaction detection**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Deep Multimodal Representation Learning for Mental Health Diagnosis**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points

PhD topic	**Design of high performance low dielectric polymer composites for integrated circuit pc**

Contact points	
PhD topic	**Developing ultrasensitive diagnostics by combining directed evolution and surface plasmon resonance**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Development, evaluation, and clinical trials of biomaterials & medical devices**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	

Short introduction &
description of PhD project

Contact points

Contact points	

PhD topic	**Image-guided Radiation Therapy based on Machine Learning**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points	

PhD topic	**Impact of Expectation Bias on Results of Randomized Clinical Trials**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	v Œ‡ o}]u ••'Œ d' ₫Đ5P Á]šZ i š

SIAT Supervisor _____

UNNC Supervisor(s) _____

Short introduction & description of PhD project

SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Magnetoelectric stimulation assisted metal-organic frameworks engineered hydrogels in treating bone injury repair**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Medical Image Processing and Artificial Intelligence**
SIAT Supervisor	

UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Methods for analyzing population level single cell genomics data**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Modelling the screen and verification of biomarkers in building the forewarning model for intelligent assistant diagnosis of mental disease including depressive disorder**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points	
PhD topic	**Multi-agent decision making based on action recognition and intention prediction in future “intelligent space”**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points

PhD topic	**One-step-ahead: Accurate Viral Mutation Prediction for Early Preparedness of Government Policies and Pharmaceuticals**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points

SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Quantitative optical imaging of physiological dynamics**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Robot assisted automatic preparation of functional materials**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points	
PhD topic	**The Investigation of Wearable Sensor for the Simultaneous Detection of Multiple Pulse Wave Velocities and Its Clinical Application**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Thermoelectric-based thermal management design for lithium-ion battery**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Ultrasound-mediated biofilm expression and application**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points	
PhD topic	**Understanding altered neural information processing under diseased conditions**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points	
PhD topic	**Vibration and sound radiation analysis of boomer sound source in deep water**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**Wearable RF sensor /biosensor and Artificial intelligence for health management**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
PhD topic	**A Novel Dynamic Body Weight Support Overground Walker based on Brain Computer Interface Powered Body Movement Recognition and Track Enabling Natural Gait training**
SIAT Supervisor	

UNNC Supervisor(s)	_____
Short introduction & description of PhD project	
Contact points	_____ _____
PhD topic	**A synthetic biology approach using engineered bacteria to mitigate environmental pollution**
SIAT Supervisor	_____
UNNC Supervisor(s)	_____
Short introduction & description of PhD project	

Contact points

PhD topic	**Advanced energy storage materials and devices**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

description of PhD project

Contact points

PhD topic	**Combinatorial Optimization for Bioinformatics Problems using Graph Neural Networks**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction	

Contact points

PhD topic	**High adaptability and reliability of wearable device systems in Internet of medical Things dealing with the extremes of changing physical conditions and environment in special applications**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points

PhD topic	**Metallic matrix composite materials in advanced electronic ol s**

Contact points	
PhD topic	**Optimal design methods of electric devices based on artificial intelligence**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	
Contact points	
Bing sPhD topic	**Video based online abnormal object recognition in grid scene**
SIAT Supervisor	
UNNC Supervisor(s)	
Short introduction & description of PhD project	

Contact points	