

# ABHISHEK PHADKE

## Curriculum Vitae

Texas A&M University Corpus Christi  
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## EDUCATION

### Ph.D. Texas A&M University, Corpus Christi

Geospatial Computer Science, *2019 to present*  
Resiliency in grids, UAV, Cybersecurity, Blockchain.

### M.S. Texas A&M University, Kingsville

Electrical engineering, *2017 to 2019*  
Renewable energy generation and transmission, Blockchain development, Multi-agent SoS

### B.E. Mumbai University, 2017

Major in Electronics Engineering, Minor in Computer science.

## ACADEMIC AND RESEARCH POSITIONS

**Research Assistant** Texas A&M University-Corpus Christi (*August 2020 - present*)  
Department of Computing Sciences

**Adjunct Faculty** Texas A&M University-Corpus Christi (*January 2020–August 2020*)  
Department of Computing Sciences  
**EEEN-3345-001-** Electronic devices & Circuits

**Research Assistant** Texas A&M University-Corpus Christi (*August 2019- December 2019*)  
Department of Computing Sciences

**Instructor** Texas A&M University-Kingsville (*May 2019- August 2019*)  
Upward Bound Rural, Upward bound Math & Science

**Teaching Assistant** Texas A&M University-Kingsville (*August 2018-December 2018*)  
Department of Electrical and computer engineering

## PROFESSIONAL WORK POSITIONS

**Jr Engineer** Amber Instruments, Mumbai, India. (*June 2016 to July 2017*)  
R&D department

**Jr Engineer** Om Energy Savers, Mumbai, India. (*June 2015 to May 2016*)  
Quality control

## PUBLICATIONS

**Phadke A.**, F.A. Medrano, S. Ustymenko & T. Chu , “*On the Inclusion of Heterogeneous Agents in Unmanned Vehicle Swarms - A Review*”, The 20th International Conference on Embedded Systems, Cyber-physical Systems, & Applications (ESCS22), July 25-28,2022, Las Vegas, Nevada (*Accepted, pending publication*)

**Phadke, A** & F.A. Medrano. A conceptual Blockchain backed framework for Healthcare Data access – Extended abstract series. Academia Letters, Article 4944. DOI: [10.20935/AL4944](https://doi.org/10.20935/AL4944)

**Phadke A.**, F.A. Medrano, Chu,T . “*Engineering resiliency in UAV Swarms- A bibliographic analysis* ”, 2022 International Symposium on Intelligent Unmanned Systems and artificial Intelligence (SIUSAI 2022) Macao, China, April 22-24, 2022. (*Accepted, pending publication*)

**Phadke A.**, F.A. Medrano, J. Brahmabhatt & S. Ustymenko. “*A Framework for an Optimized Smart Energy System*”, 2022 International Symposium on Electrical, Electronics and Information Engineering (ISEEIE 2022), Chiang Mai, Thailand, February 25-27, 2022. (*Accepted, pending publication*)

**Phadke, A.**, F.A. Medrano & S. Ustymenko. “*Applications of Blockchain in E-government*”. 2021 European Conference on Computer Science and Technology (ECCSIT 2021), Budapest, Hungary. December 14, 2021 (*Accepted, pending publication*)

**Phadke A.**, F.A. Medrano, J. Brahmabhatt “*A Conceptual Framework for a Blockchain-based Tax payment Financial Service.*” 2021 International Conference on Computational Science and Computational Intelligence (CSCI 2021), December 15-17, Las Vegas, Nevada (*Accepted, pending publication*)

**Phadke A.**, F.A. Medrano, S. Ustymenko “*A Review of Vehicular Micro Clouds*” 2021 International Conference on Computational Science and Computational Intelligence (CSCI 2021), December 15-17, Las Vegas, Nevada (*Accepted, pending publication*)

**Phadke A.** and S. Ustymenko, “*Examining Security and forensics across Database Management Systems*”, 2021 International conference on Security and Management (SAM21), July 26-29,2021, Las Vegas, Nevada (*Accepted, pending publication*)

**Phadke A.** and S. Ustymenko, "Updating the Taxonomy of Intrusion Detection Systems," 2021 IEEE 45th Annual Computers, Software, and Applications Conference (COMPSAC 2021), pp. 1085-1091, DOI: [10.1109/COMPSAC51774.2021.00148](https://doi.org/10.1109/COMPSAC51774.2021.00148)

**Phadke, A.**, & Medrano, F. A. (2021). *A Resilient Multi-UAV System of Systems (SoS)*. Academia Letters. DOI: [10.20935/AL1659](https://doi.org/10.20935/AL1659)

## CONFERENCE PRESENTATIONS AND INVITED TALKS

**Phadke A.**, F.A. Medrano, Chu,T . “*Engineering resiliency in UAV Swarms- A bibliographic analysis* ”, 2022 International Symposium on Intelligent Unmanned Systems and artificial Intelligence (SIUSAI 2022) April 22-24, 2022. (*Virtual*)

**Phadke A.,** F.A. Medrano, J. Brahmhatt & S. Ustymenko. “*A Framework for an Optimized Smart Energy System*”, 2022 International Symposium on Electrical, Electronics and Information Engineering (ISEEIE), February 25-27. (Virtual)

**Phadke, A.,** F.A. Medrano & S. Ustymenko. “*Applications of Blockchain in E-government*”. 2021 European conference on Computer Science and Technology. (ECCSIT 2021) December 14. (Virtual)

**Phadke A.,** F.A. Medrano, J. Brahmhatt “*A Conceptual Framework for a Blockchain-based Tax payment Financial Service.*” 2021 International Conference on Computational Science and Computational Intelligence (CSCI 2021), December 15-17, (Virtual)

**Phadke A.,** F.A. Medrano, S. Ustymenko “*A Review of Vehicular Micro Clouds*” 2021 International Conference on Computational Science and Computational Intelligence (CSCI 2021), December 15-17, (Virtual)

**Phadke A.** and S. Ustymenko, "*Updating the Taxonomy of Intrusion Detection Systems,*" 2021 IEEE 45th Annual Computers, Software, and Applications Conference (COMPSAC 2021), pp. 1085-1091, DOI: [10.1109/COMPSAC51774.2021.00148](https://doi.org/10.1109/COMPSAC51774.2021.00148) (Virtual)

## AWARDS AND GRANTS

- Geo-Spatial Engineering GR Scholarship- Texas A&M University, Corpus Christi, Spring 2022 **\$100**
- CBI endowment- Texas A&M University, Corpus Christi  
Fall 2021, **\$750**
- Geo-Spatial Engineering GR Scholarship- Texas A&M University, Corpus Christi  
August 2021 to May 2022, **\$300**
- International Impact Scholar - Texas A&M university, Corpus Christi  
August 2021 to May 2022, **\$1,899**
- Division of Research and Innovation, Texas A&M University, Corpus Christi, Student research  
Competition award, September 2021, **\$775**
- 3M thesis competition, University level, Texas A&M University, Corpus Christi-People’s Choice  
award, April 2021, **\$500**
- Spring DT credit-Texas A&M University, Corpus Christi, Spring 2021, **\$200**
- Geo-Spatial Engineering GR Scholarship- Texas A&M University, Corpus Christi  
Spring 2021, **\$500**
- CBI endowment- Texas A&M University, Corpus Christi  
Spring 2021, **\$120**
- International Impact Scholar - Texas A&M university, Corpus Christi  
August 2020 to May 2021, **\$1,899**
- Graduate Student Merit Scholarship - Texas A&M University, Kingsville  
August 2017 to July 2018, **\$10,000**

**CERTIFICATIONS**

Certifications in Electric utility fundamentals, Renewable energy, Digital manufacturing, Enterprise system management, Advanced manufacturing process analysis, IoT, and embedded systems.

Complete list:

<https://drive.google.com/file/d/1ubKBJ1nciRj28IDvghWsHIRgm-ShHLZI/view>

**RESEARCH INTERESTS**

**Resiliency:** System resiliency, **multi-agent systems**, **Renewable energy:** Energy generation using renewable energy sources, efficient transmission. **Blockchain :** Applications in E-governance & Smart city.