Application No.
APL20240001

Application Status
Pending

Full Name
Rajesh Kumar

Email
rajeshk@goa.bits-pilani.ac.in

Phone Number
8690102980

Date of Birth
1985-01-01

Experience
Seasoned academician in BITS Pilani with modelling of critical infrastructures

Core Competencies
IoT/ M2M, Infrastructure, Data Analytics/ AI-ML Expert, Blank Space to fill, Edge computing devices, IoT, Sensors

Organization Name
ICB

Website URL of the organisation
https://evetanseva.nic.in/

Alternate Email

Potential Interest Areas
["Virtual√Digital Twin Layer"]

Office Address
noida

Organisation HQ address
Delhhi

Previous Experience in Related Projects
I have been working as PI in two externally sponsored projects: 1: DSCI sponsored project on cyber-resilience using digital twins 2. IHUB-IITK sponsored project on modelling and analysis of critical interconnected infrastructures

Achievements or Recognitions
Assistant Professor Research Interests: Formal Verification, Cyber-Physical systems. Modelling complex infrastructures Assistant Professor, Department of Computer Science & Information Systems Birla Institute of Technology & Science, K.K Birla Goa Campus Goa, INDIA (Please note a change in location and email address, rajesh.k@pilani.bits-pilani.ac.in do not work anymore) rajeshk@goa.bits-pilani.ac.in 0832-2580821 https://www.linkedin.com/in/rajesh-kumar-75b76b14/ OVERVIEW TEACHING RESEARCH PROJECTS PUBLICATIONS ACHIEVEMENTS FACULTY NEWS INVITED TALKS OPPORTUNITIES I obtained my PhD under the guidance of Prof. dr. Marielle Stoelinga and Prof. dr. Arend Rensink at University of Twente, Netherlands in 2019. The title of my dissertation was "Truth or Dare: Quantitative security risk analysis via attack trees". My PhD dissertation is available here. My PhD viva voice examination can be viewed at Vimeo from here. I obtained my master in communication networks from Scuola Superiore Sant Anna, Pisa, Italy and Bachelor in electrical engineering from College of Technology and Engineering, Udaipur. I have more than 5 years of experience working in diverse settings, ranging from Fortune 500 companies (Schneider electric as Engineer-product application, Telecom Italia- Intern, Tata motors- Intern), Government companies (New India Assurance Company Limited - Administrative officer) to educational institutions (Sir Padampat Singhania University founded by J.K group). Prior to joining BITS in 2019 at Pilani campus, I was a software engineer in industrial cybersecurity divison at Croon wolter and Dros, Apeldoorn, Netherlands. I am a recipient of multiple scholarships (worth more than 2 crores) including prestigious Erasmus Mundus doctorate fellowship and Erasmus Mundus Master fellowship. Additionally, my master was funded by Indo-Italian chamber of commerce (https://postgradinitaly.esteri.it/postgradinitaly/en/). In past I have also received travel grants from DAAD, European space agency, NATO (Germany) and FBK, Trento. My PhD was funded by European Union FP7

Trespass project. I am a winner of several accolades, prizes and distinctions from multiple government, universities and state-sponsored agencies.

Title
 a data driven, digital twin enabled smart prognostic platform for cyber-risk resilience, situational awareness and crisis management for industrial systems

Category
Predictive analytics

Strategic Vision

Objectives
 Output of the proposal is a software tool that can be be invoked in two modes -- online or offline. When invoked offline it provides informed decisions on hazard progression, cost benefit analysis of countermeasures, design alternatives and scenario analysis. When invoked online, it guides practitioner on his optimal actions ensuring operational continuity, via self Output of the proposal is a software tool that can be be invoked in two modes -- online or offline. When invoked offline it provides informed decisions on hazard progression, cost benefit analysis of countermeasures, design alternatives and scenario analysis. When invoked online, it guides practitioner on his optimal actions ensuring operational continuity, via self configuration, graceful degradation options and crisis aversion configuration, graceful degradation options and crisis aversion

Alignment with Project Goals

Contribution to Project Goals
e contribute to the ongoing call by developing predictive analytics techniques using both model and data driven approach

Technological Resources
Human Resources Commitment
Other Information
Certification

I declare that all the information given by me in this application and documents attached hereto are true to the best of my knowledge and that I have not willfully suppressed any material fact. I accept that if any of the information given by me in this application is in any way false or incorrect, my application may be rejected, any offer of the grant may be withdrawn or my candidature may be rejected at any time.