

William Paterson University
College of Science and Health
Department of Computer Science

Computer Science Department Colloquium

Keynote Speaker: **Vaibhavi Tiwari**

Chief Technology Officer (MyGreen Health)



April 9, 2025 (Wednesday), 5:30 PM – 8:00 PM

University Commons Student Center (Multipurpose Room)

Dinner will be provided.

Please RSVP [here](#) by April 2, 2025

*The Invisible Battlefield of Ransomware, Data Breaches,
and AI-Powered Attacks*

Abstract

Cybersecurity has transformed from simple firewalls and antivirus software into a high-stakes battleground dominated by AI-driven threats, ransomware, and large-scale data breaches. While digital innovation has revolutionized connectivity, it has also exposed businesses, governments, and individuals to sophisticated cyberattacks that exploit both technological and human vulnerabilities. In today's interconnected world, cyber threats are not just IT concerns but economic and geopolitical weapons capable of disrupting entire industries. AI-powered attacks, deepfake fraud, and autonomous hacking tools have made the cyber landscape more unpredictable than ever, with ransomware groups operating like tech startups and AI being weaponized to break encryption and manipulate information at scale. Defenders now face a daunting challenge—how do we stay ahead of threats that evolve faster than our security measures? This keynote will cover **The Cyber Warfront**, **The Threats We Face**, and **The Future of Cyber Defense**, offering insights into how AI, quantum computing, and proactive security strategies can help us turn the tide against the next generation of cyber threats.

Biography

Vaibhavi Tiwari is a distinguished technologist, researcher, and entrepreneur specializing in artificial intelligence, data engineering, and healthcare technology. As the **Chief Technology Officer** at MyGreen Health, she leads the development of AI-powered, blockchain-secured healthcare solutions, focusing on unifying fragmented health records and enabling transparent, patient-centric care. With over eight years of experience in traditional and digital healthcare systems, including her tenure at Oracle Cerner, she has played a crucial role in advancing AI-driven healthcare applications. She holds a bachelor's degree in Computer Science and later advanced her expertise with a master's in Computer Applications from **NITK Surathkal**. Her passion for data-driven solutions led her to pursue a MicroMasters in Data and Statistics from **MIT**, further strengthening her analytical skills. To deepen her knowledge in AI and big data, she earned a second master's in Computer Science from Montclair State University, equipping her with a strong foundation in cutting-edge technologies and research. Vaibhavi has multiple IEEE publications, including work on **Ransomware, Drones, and AI-driven cyber threat analysis**. She has authored a book on drone forensics. Her AI innovations include an LLM (Large Language Model) mimicking a Primary Care Physician and an AI-powered health assistant. She has published technical articles on DZone and Kindle, covering AI-powered applications and LLMs. As a **Globe Awards Judge**, she contributes to shaping industry standards in technology and cybersecurity. Recognized for her expertise, she was nominated for the 'Woman Technical Writer of the Year' award and won the **Silver Award** in this international recognition. She also actively mentors through the **Women in Big Data** program. Beyond technology, she has worked on cybersecurity in autonomous vehicles, focusing on AI-driven threats and defense strategies. Committed to advancing AI in healthcare, she envisions global expansion for MyGreen Health, integrating AI for medical diagnostics, and ensuring data privacy and security in AI-driven solutions, advocating for a transparent and accessible future in healthcare technology.

Agenda

- 5:30 – 6:00** Guests arrive and dinner starts
- 6:00 – 6:20** Welcome message: **Dr. Venkat Sharma**, Dean of the College of Science and Health, WPU
- 6:25 – 6:30** Keynote Speaker introduction: **Dr. Cyril S. Ku**, Professor of Computer Science, WPU
- 6:30 – 7:15** Keynote speech: **Vaibhavi Tiwari**, Chief Technology Officer, MyGreen Health
- 7:15 – 7:45** Q & A with **Vaibhavi Tiwari**
- 7:45 – 8:00** Closing remark: **Dr. Cyril S. Ku**
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All are welcome! This colloquium is open to everyone in the William Paterson University community. For further information, please contact Dr. Cyril S. Ku (kuc@wpunj.edu, 973.720.2952), Department of Computer Science, William Paterson University, Wayne, NJ 07470.
