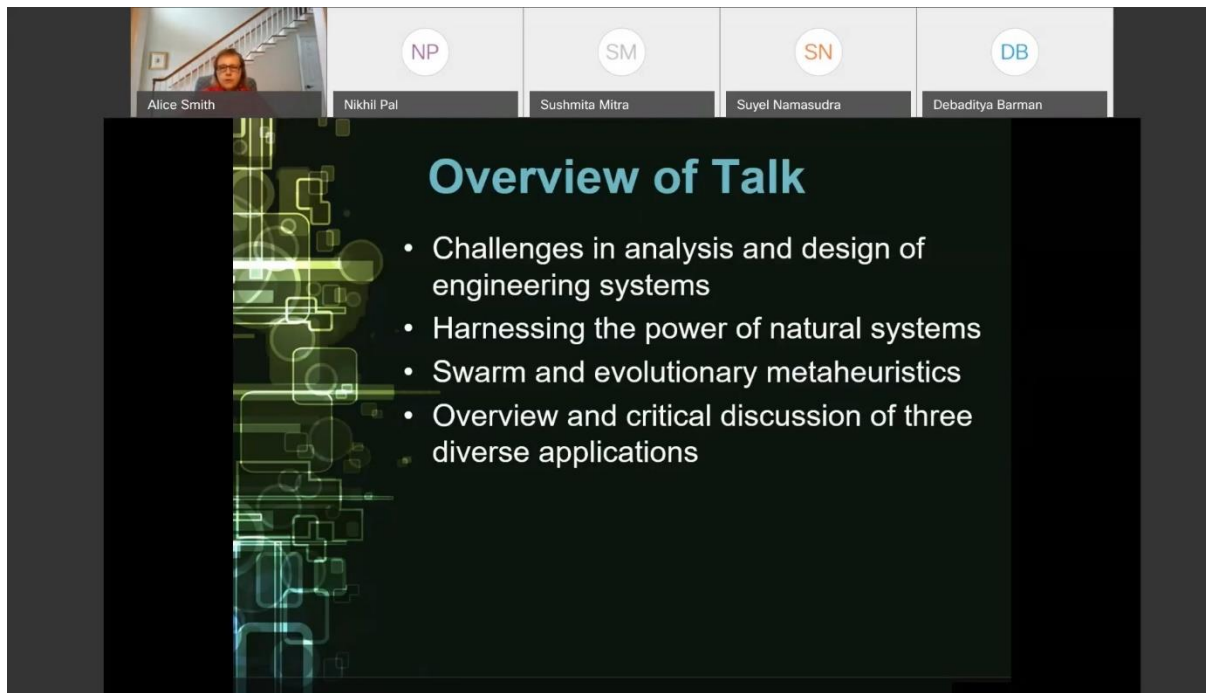


Report on IEEE CIS DL “Design Optimization Inspired by Nature” by Prof. Alice Smith of Auburn University

A IEEE Computational Intelligence Society (CIS) distinguished Lectures series was successfully completed on 27th Jan 2021 at 7:30 PM (IST). The topic of the talk was “Design Optimization Inspired by Nature”. The speaker for the said DL was **Prof. Alice Smith from Auburn University**. The talk was attended by 61 participants comprising faculty members, research scholars and students out of which 7 were active IEEE members. The talk started with the challenges in analysis and design of engineering systems and followed by some nice case studies in facility planning and drone system.

The event ended with vote of thanks from present IEEE CIS chair Prof. Tandra Pal.



The screenshot shows a Zoom meeting interface. At the top, there are four video thumbnails for participants: Alice Smith, Nikhil Pal, Sushmita Mitra, and Suyel Namasudra. To the right of these are four circular icons with initials: NP, SM, SN, and DB. Below the thumbnails, the names of the participants are listed. The main content of the slide is a dark green background with a glowing circuit-like pattern on the left. The title "Overview of Talk" is in a light blue font. Below the title, there is a bulleted list of four points.

NP	SM	SN	DB
Alice Smith	Nikhil Pal	Sushmita Mitra	Suyel Namasudra

Overview of Talk



- Challenges in analysis and design of engineering systems
- Harnessing the power of natural systems
- Swarm and evolutionary metaheuristics
- Overview and critical discussion of three diverse applications

Alice Smith NP SM SN DB

Nikhil Pal Sushmita Mitra Suyel Namasudra Debaditya Barman

Case Studies

- Fire station location in Auburn, AL USA
 - 33 demand points
 - There are currently 5 fire stations
- Solid waste transfer stations in Mexico City
 - 7,685 demand points
 - There are currently 12 transfer stations

+4

Alice Smith NP SN DB SN

Nikhil Pal Suyel Namasudra Debaditya Barman Suyel Namasudra

On the Fly Drone Placement

