Nexcepta

Driving creative solutions through innovation

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Nexcepta, Inc.

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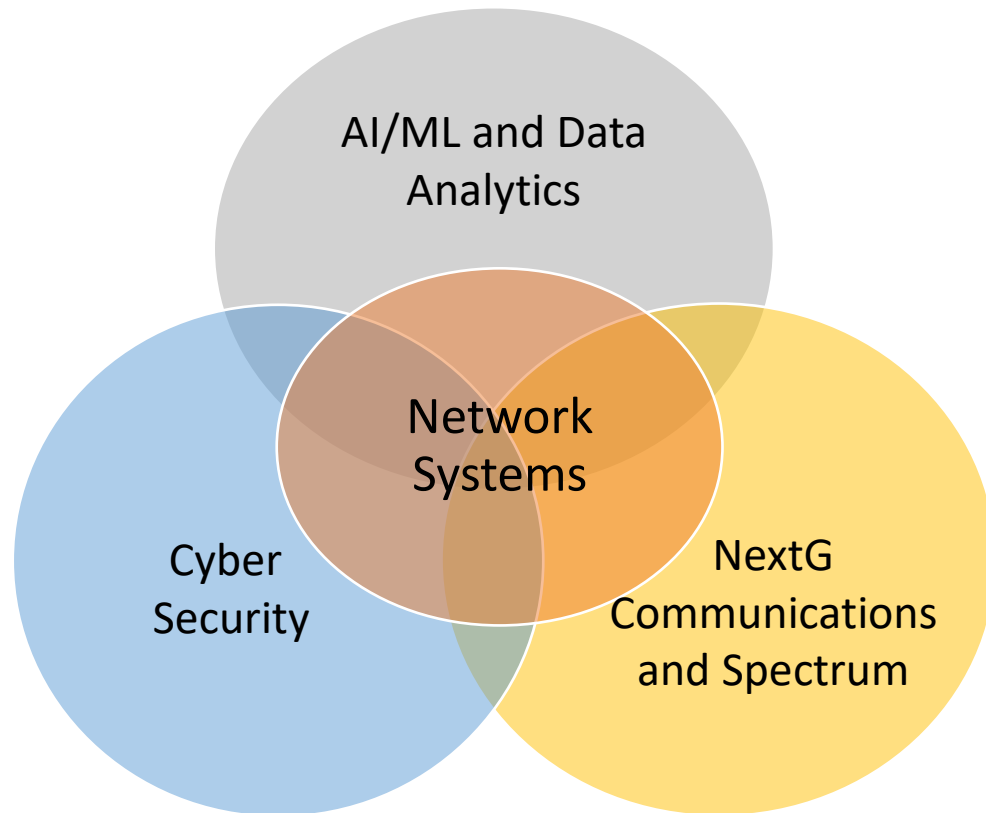
Nexcepta Overview

- Founded by former government and Industry research scientists and engineers.
- Headquartered in Gaithersburg, MD (Washington DC Metro Area).
- Developing creative technologies for high-impact operational transition and commercialization.

- **Technical Expertise**
  - AI/ML applications in Computer vision, NLP, and RF/Radar Signal Processing.
  - Adversarial ML and Security of AI/ML
  - Generative AI
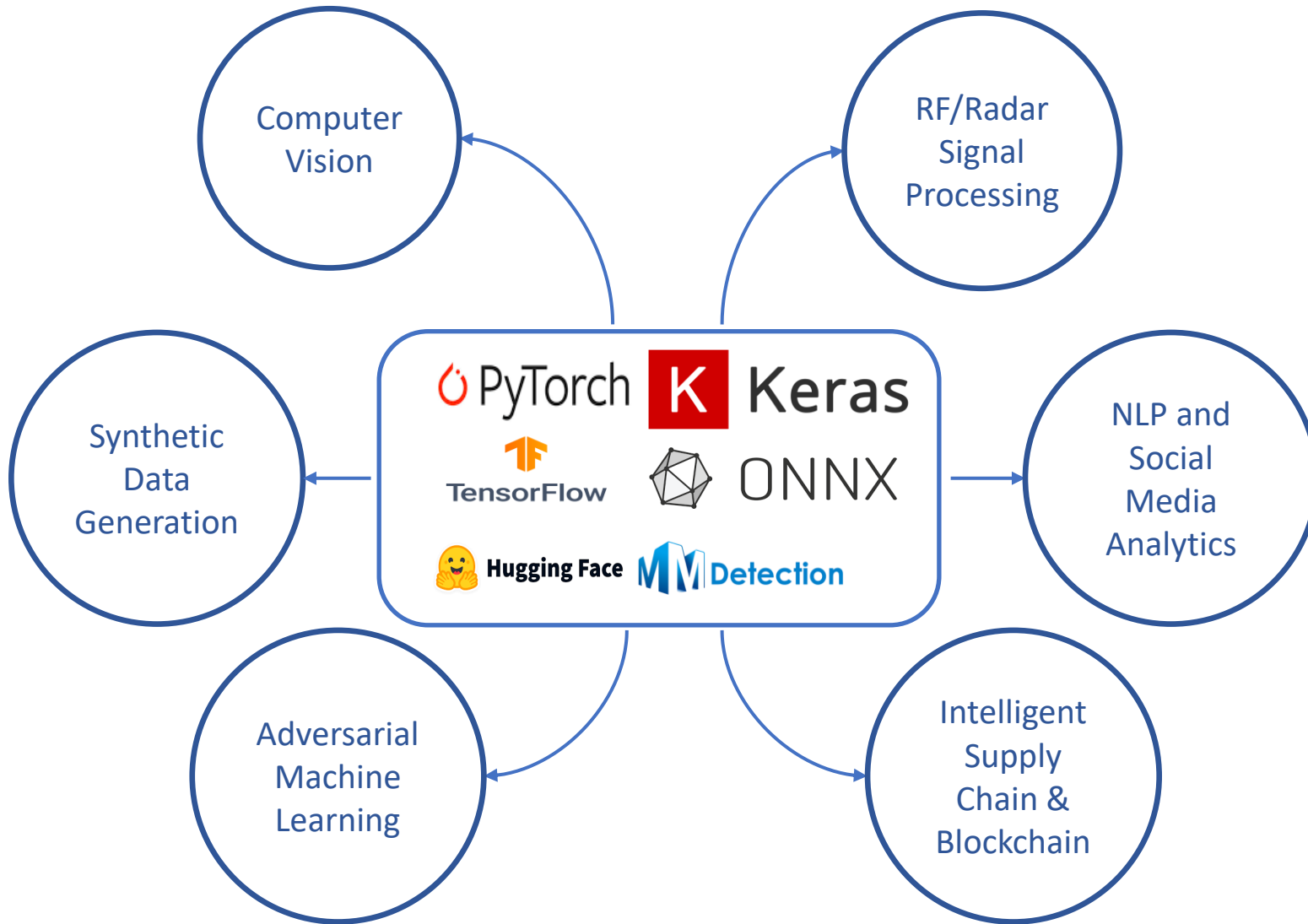 - High Performance and Edge Computing
  - Cyber Security

FROM CONCEPT TO SYSTEM, WE DELIVER ADVANCED TECHNOLOGIES!

Core Technology Areas

AI/ML and Data Analytics

Cyber Security

Network Systems

NextG Communications and Spectrum

- Management team has over 100 years of combined experience in the technology areas.

- **Defense:** Innovative portfolio of AI/ML enabled solutions for Computer Vision, Speech processing, RF/Radar signal processing, Natural Language Processing (NLP) and Cybersecurity.

- **Commercial:** Transformative open-source solutions that unleash the full potential of 5G and 6G through O-RAN and vRAN.

- Principal Scientist, Dr. Kemal Davaslioglu was a Principal Investigator in multiple BAA and SBIR/STTR projects including **object detection, tracking, and re-identification**.

AI/ML and Data Analytics

Prior Work Related to the IARPA Video LINCS

- Object detection and tracking with different sensor modalities
  - EO Imagery captured at different altitudes and point of views
  - IR-based target detection
  - ISAR-based target detection
  - Cross-view matching

- Sensor fusion

- Multi Target Multi Camera (MTMC) tracking and re-identification
  - Vehicles in traffic cameras
  - Pedestrians in street cameras

- Open-set recognition

- Image-text retrieval using Large Language Models