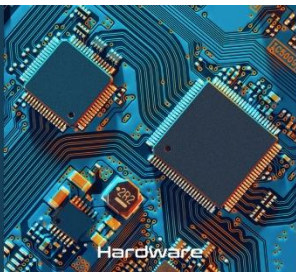


Datamanagement in door AI-gestuurde Edge Applicaties

Gevorg Melikdjanjan
Logic Technology

D&E
EVENT



Het ontwerpen van
innovatieve elektronica

Woensdag 20 maart 2024
1931 Congrescentrum 's-Hertogenbosch

Edge AI gedreven door Big Data

Global Data Creation is About to Explode

Actual and forecast amount of data created worldwide 2010-2035 (in zettabytes)



@StatistaCharts

Source: Statista Digital Economy Compass 2019

statista

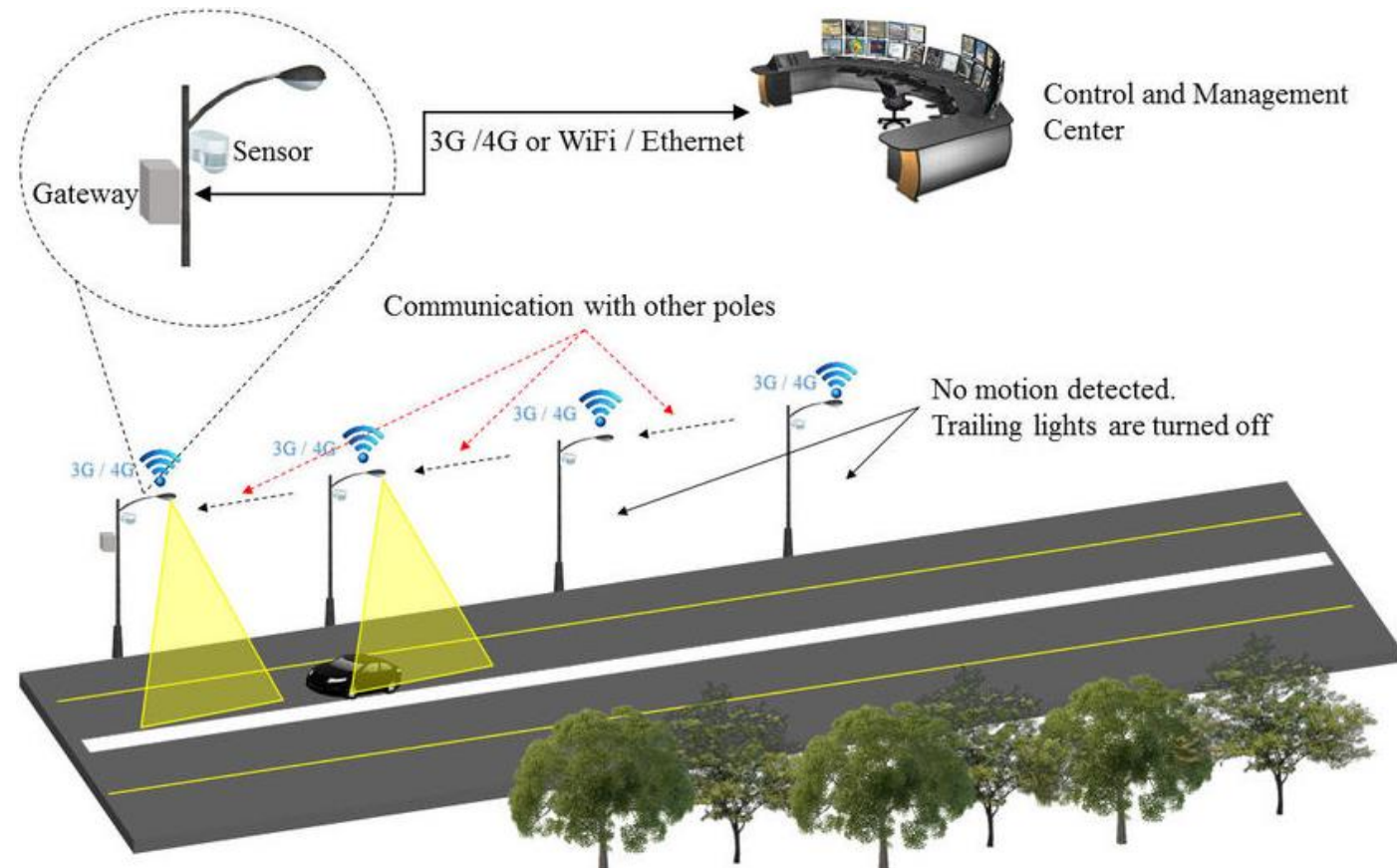


D&E
EVENT

Het ontwerpen van innovatieve elektronica

Woensdag 20 maart 2024
1931 Congressentrum 's-Hertogenbosch

Traditionele Edge Computing



Edge AI



Verzamelen

Analyse

Actie

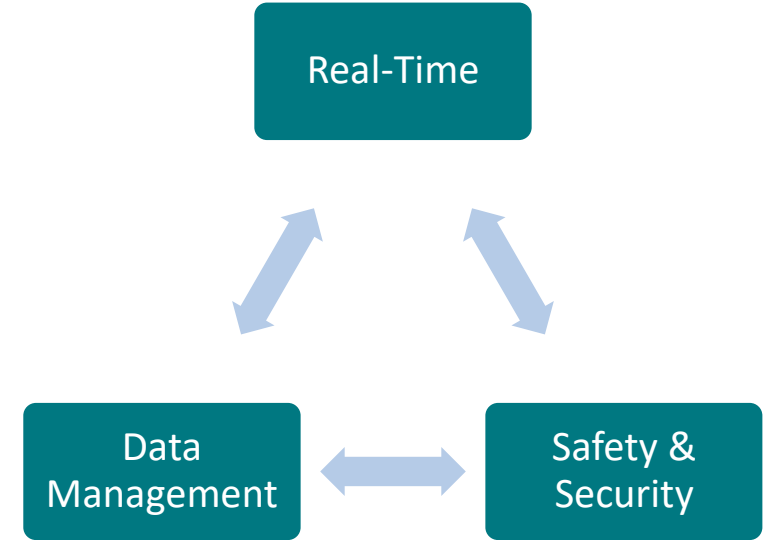
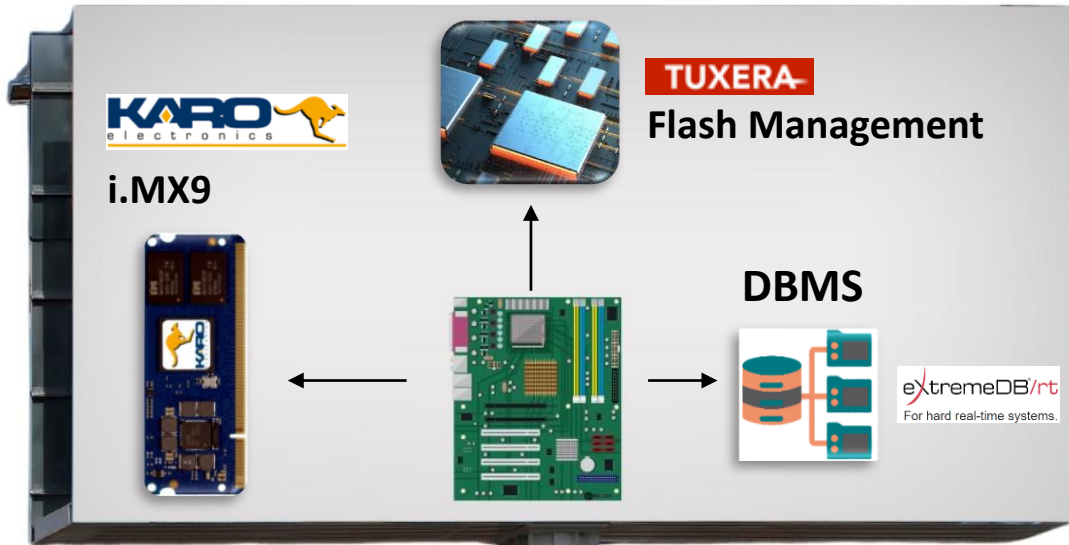


Woensdag 20 maart 2024
1931 Congrescentrum 's-Hertogenbosch

Use Case: AI in Vision Edge Device



Uitdagingen



i.MX8

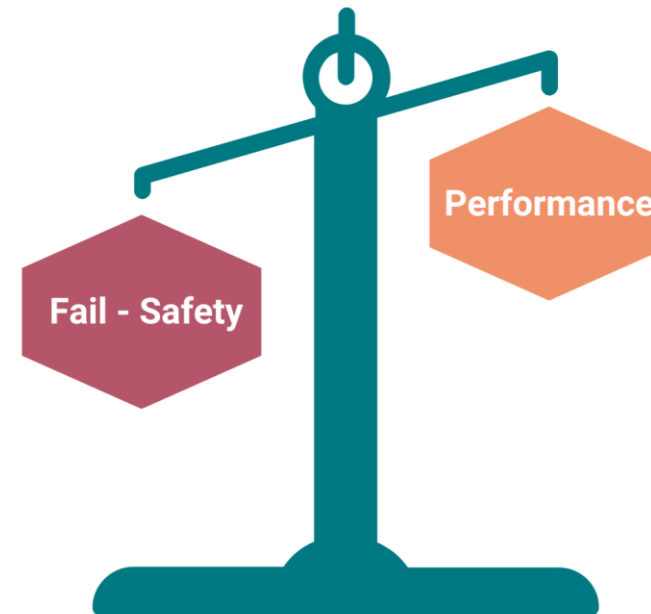


Rolls-Royce

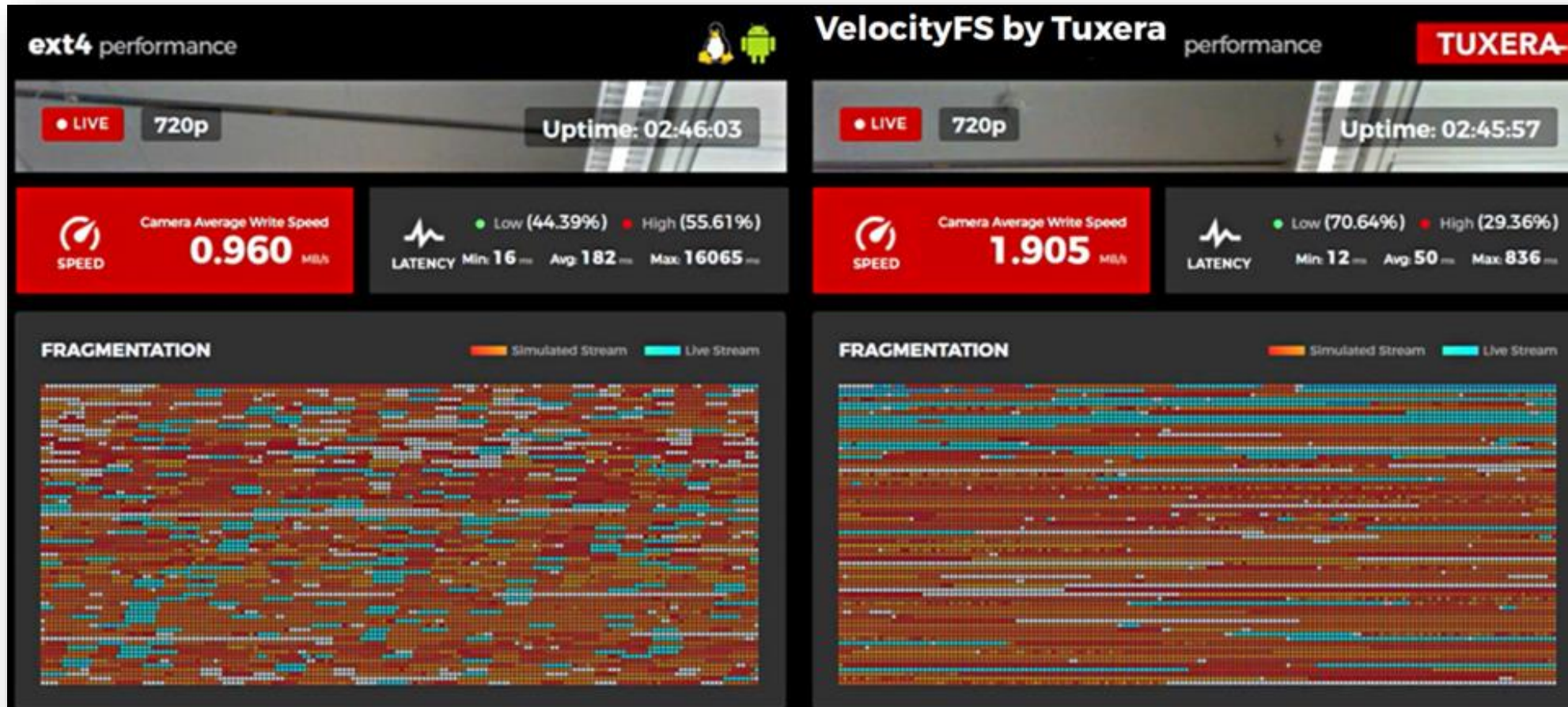


Flash Geheugen Management

- Fragmentatie
- Transactioneel file systeem
- Wear Leveling: Static of Dynamic
- Secure Erase



Fragmentatie



Transactioneel File Systeem

- Fail-safe
- Atomische schrijfacties: alles of niets
- Consistent snelle boot en mount tijden

Wear leveling

- Static
- Dynamic



Secure Erase

- Data privacy
- FS en Flash Driver
- E-Bike systeem



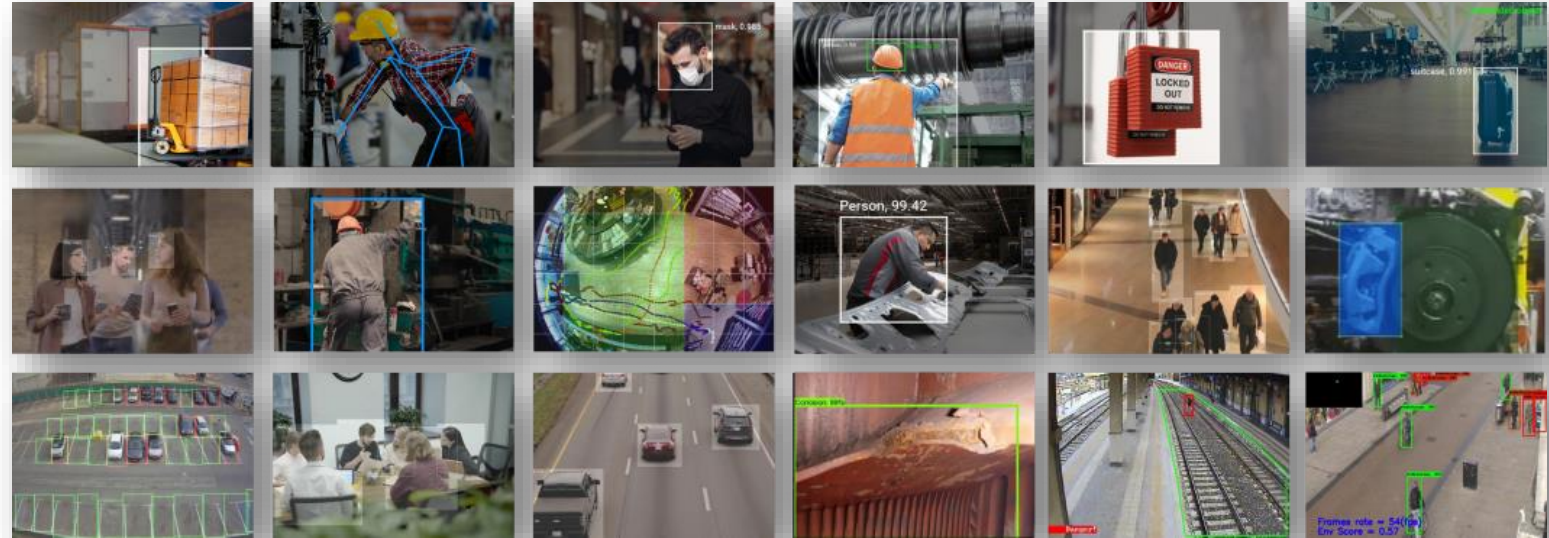
Database management

- Hard Real-Time Database
- RAM en CPU
 - Indexes
 - Indexfragmentatie
- Gegevenscompressie



Edge AI

- Platform benadering:
 - Flash Management
 - Real-time Computing
 - Energieconsumptie
 - High Availability
 - Privacy & Cybersecurity



Q&A

Get started

Computer Modules

Flash Management

Database Management

Verder praten?

Bezoek stand nr.14

AI Edge Vision Demo