

Map-MET Context Aware Map Application

Karoshi

Sponsored by ASELSAN

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Outline

- ◉ **Group Members**
- ◉ What was Map-MET?
- ◉ Where to use?
- ◉ Overall System
- ◉ Current State
- ◉ Future Work
- ◉ Demonstration
- ◉ Conclusion
- ◉ References

Karoshi Members



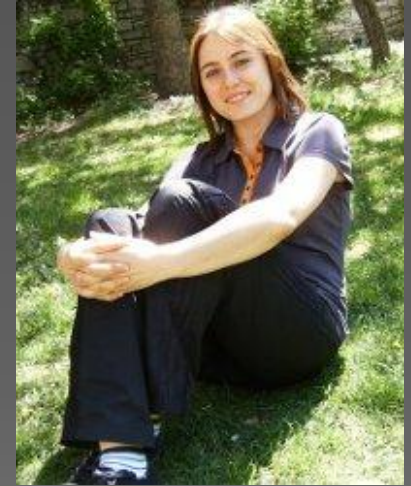
Fatma Akinci



İlker Argın



İsmail Can
Coşkun



Meryem Sağcan

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Map-MET Project

- ◉ **Main Problem:** Same user interface under different conditions
- ◉ **Our solution:** Gather environmental data and use them as input for UI design.
- ◉ A map application with interactive UI

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Areas of Use

- Military



Source: <http://www.kaliteliresimler.com/img927.htm>

Areas of Use

○ Transportation



Source: http://www.funpub.net/poze/mare/GPS+Taxi-Land_1200053789.jpg

Areas of Use

- Anybody

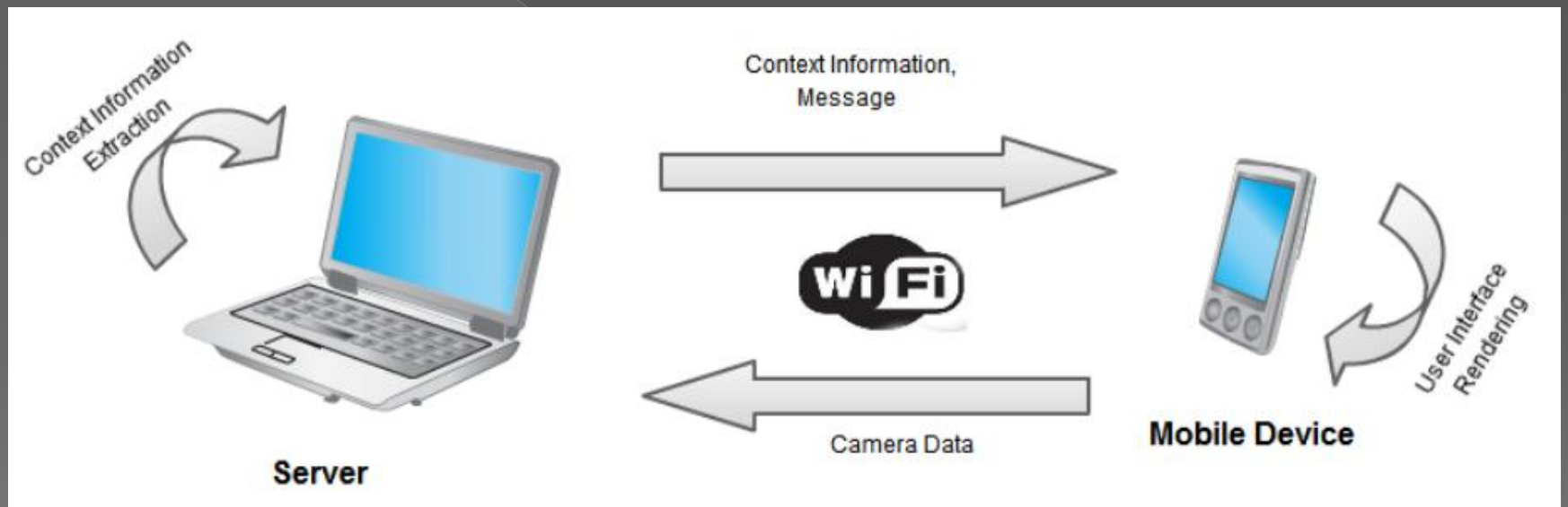


Source: <http://www.globalgiants.com/archives/fotos9/GPSUser-01.jpg>

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Overall System



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What have been done?

- Extraction of movement and luminosity information from video stream.
- Network connection established.
 - > Messaging system implemented.
 - > Extracted data is transported to mobile device.
- All user interface components are designed and implemented.

Image Processing Algorithms

◉ Movement Extraction

- > Shi and Tomassi Feature Tracking
 - Finds most trackable features
 - Easy to use
- > Optical Flow
 - Starting point for user movement

◉ Light Extraction

- > Luma component of YUV colorspace

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Future Work (Optional)

- ◉ Further UI design
- ◉ Video stream transfer from mobile device camera
- ◉ Improving image processing algorithms

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References

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Questions?



Thank You For Listening!

