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"Silicon Valley at Monte da Caparica."
- PC World, June 2001



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LiveAnywhere Traffic

António Câmara





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LiveAnywhere Traffic

- Traffic information processing in real time
- Traffic forecast
- Optimal routing
- Mobile access





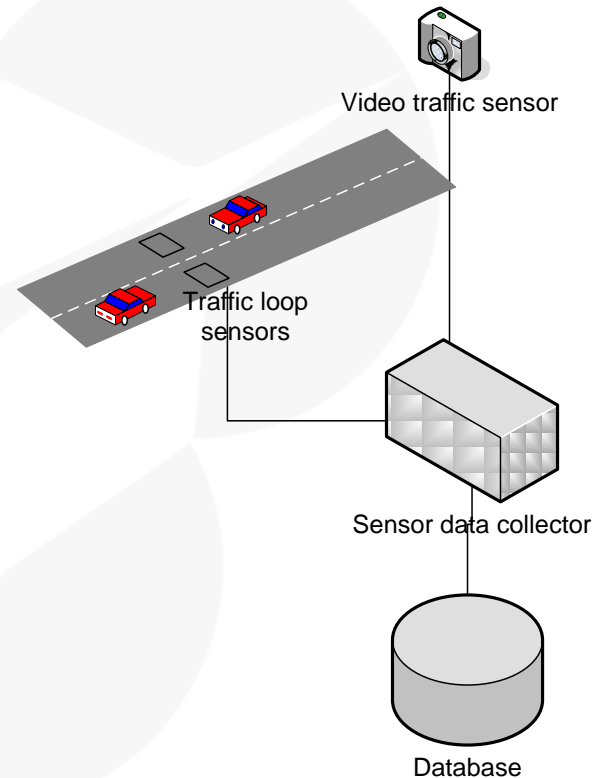
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Data collection

- **Information collected by sensors (ground and video)**
 - Average speed
 - Intensidade de tráfego
- **Variables**
 - Time (hour, day, week)
 - Meteo variables





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Forecasting

- **Neural network based algorithms**
- **Uses information collected on past events**
- **Infers relationships between traffic intensity in space and time**

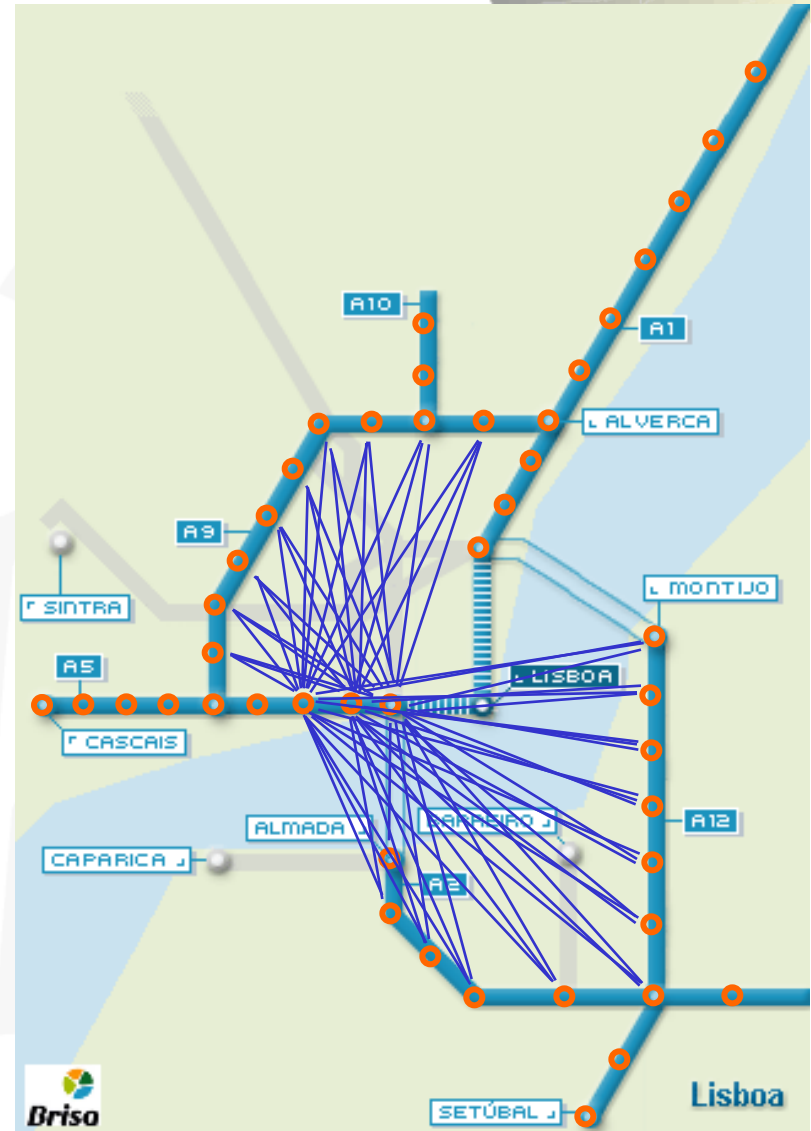


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- **Availability of sensor network**
- **Machine learning**
 - Done periodically
 - Relates values obtained with each sensor with all others obtained at given time
 - 5 minutes
 - 10 minutes
 - 20 minutes
 - Classified by
 - Hour
 - Day of the week
 - Day of the month
 - Month
 - Holidays
 - Meteorological variables



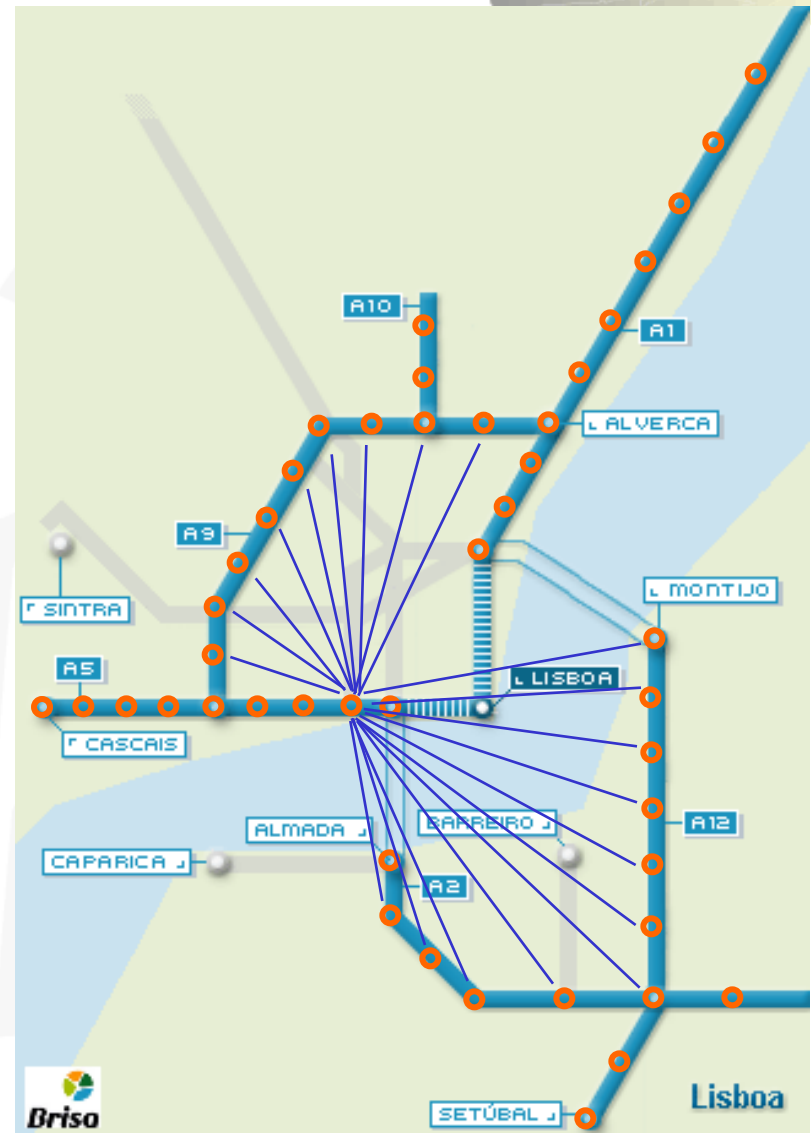


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- Given the information at a given moment, its is possible to forecast the traffic intensiyyt in every point within:
 - 5 minutes
 - 10 minutes
 - 20 minutes





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Alerts

- **Detection of anomalous traffic situations**
- **Alerts based on:**
 - Current information
 - Forecasted information



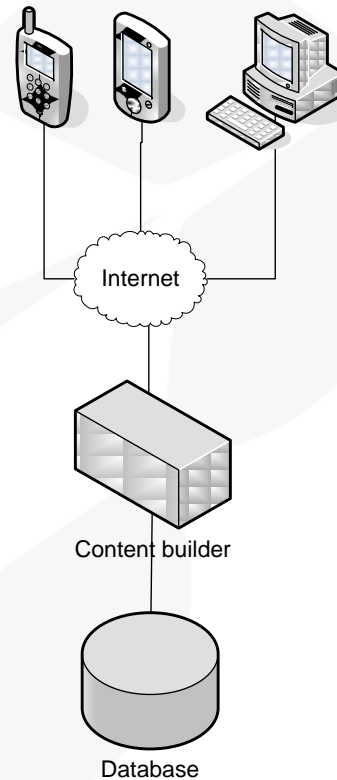
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Visualization

- Information available in XML
- Available for any device



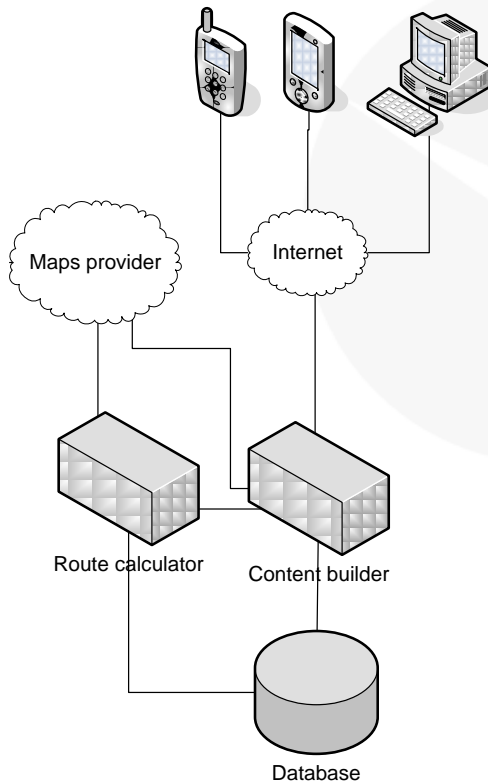


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Visualization





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