

Institute of Systems Architecture, Chair of Computer Networks

# PPchef

## Final Presentation

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## Smoking tender pulled pork

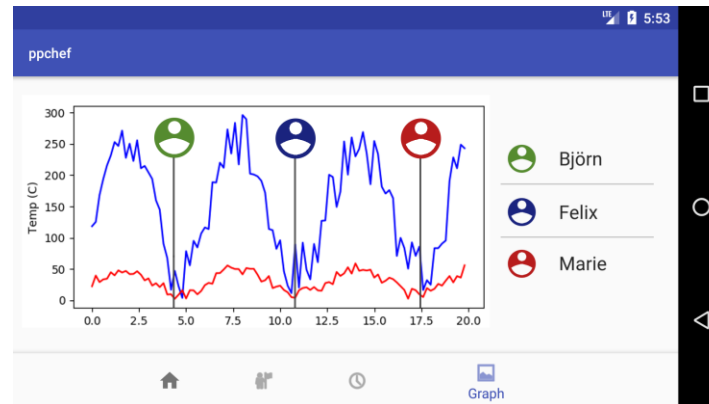
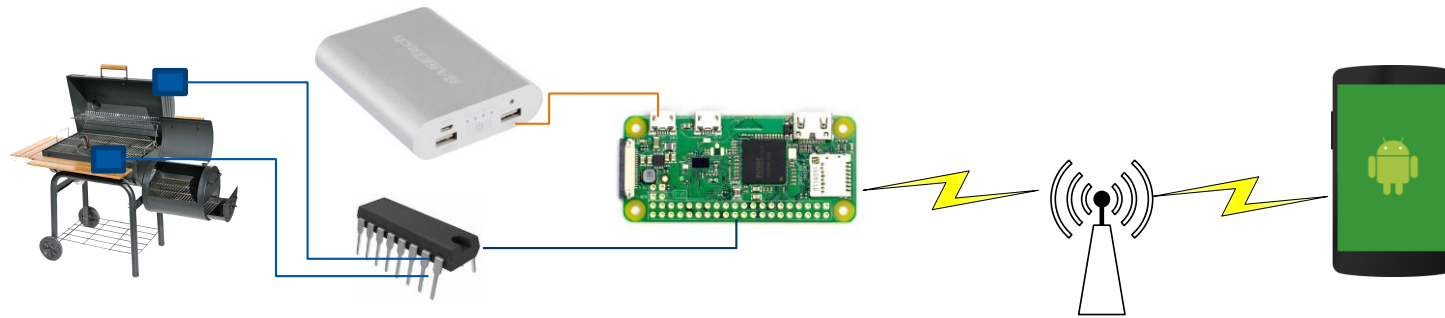


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## Context Adaption Problems

- Connection might fail while sending an Alert, or user might not act on an Alert
- Missing re-heating once might ruin the whole roast
  - When an alarm is due, wait for confirmation
  - Resend alarm when no confirmation was received
- Temperature curve might be abnormal because of a faulty sensor or when the lid is not closed properly
  - Predict temperature curve from gathered values, schedule an alarm if measured temp exceeds threshold

## Done?

- Server physically build and set up
- Server running Measurement System, Forecasting System and Alert Manager, Context adaptation challenges solved
- Android client software getting alerts and forecasts, running alerts
- Android software on debugging – state, GUI not finished

## To do?

- Finish Client GUI
- Implement UDP Auto-Discovery
- Test System in Real Life



## Lessons learned

- Raspberry Pi is a powerful system for measurements
- Analog Curcuits should be reviewed by electronics engineers
- Error handling and using a Watchdog is essentially for reliable systems
- Avoid cyclic dependencies in the inter-Thread communication
- **ØMQ** (ZeroMQ) is powerful, but complex
- Isolate Workpackages for team members, define messages for communication