

VOLVO CARS



TODAY



- Volvo Cars and software
- Why are we here
- Your project





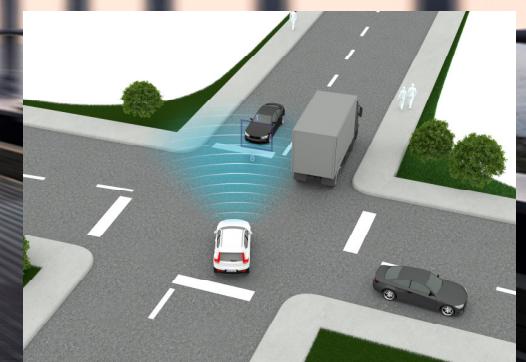


VOLVO CARS AND SOFTWARE ?



Times are changing

- From hardware to software focus
- Traditional driver/owner setup is changing
- Software is an asset
- Software now developed in-house
 - Infotainment
 - Core systems
 - Autonomous cars (Volvo/Autoliv)
 - Etc.





WHY ARE WE HERE

- Good match course / our development
- Letting you know that Volvo Cars is developing a lot of software in Gothenburg
- We are interested in your ideas for automotive!
- Meeting students that are looking for summer jobs, thesis work or job after graduation.





WHY ARE WE HERE TODAY TODAY

- Input and guidelines for your projects
- We are available during the course for discussions on ideas etc
- We will be part of the final presentations





CURRENT PRODUCT DEVELOPMENT

Volvo Cars is developing an android-based headunit

Why

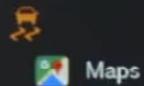
- Quality
- Eco-system of apps
- Evolving platform

How

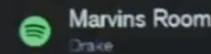
- In-house development
- Partnership with Google and Intel



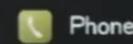
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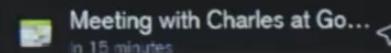
Maps



Marvin's Room
Drake



Phone



Meeting with Charles at Go...
In 15 minutes



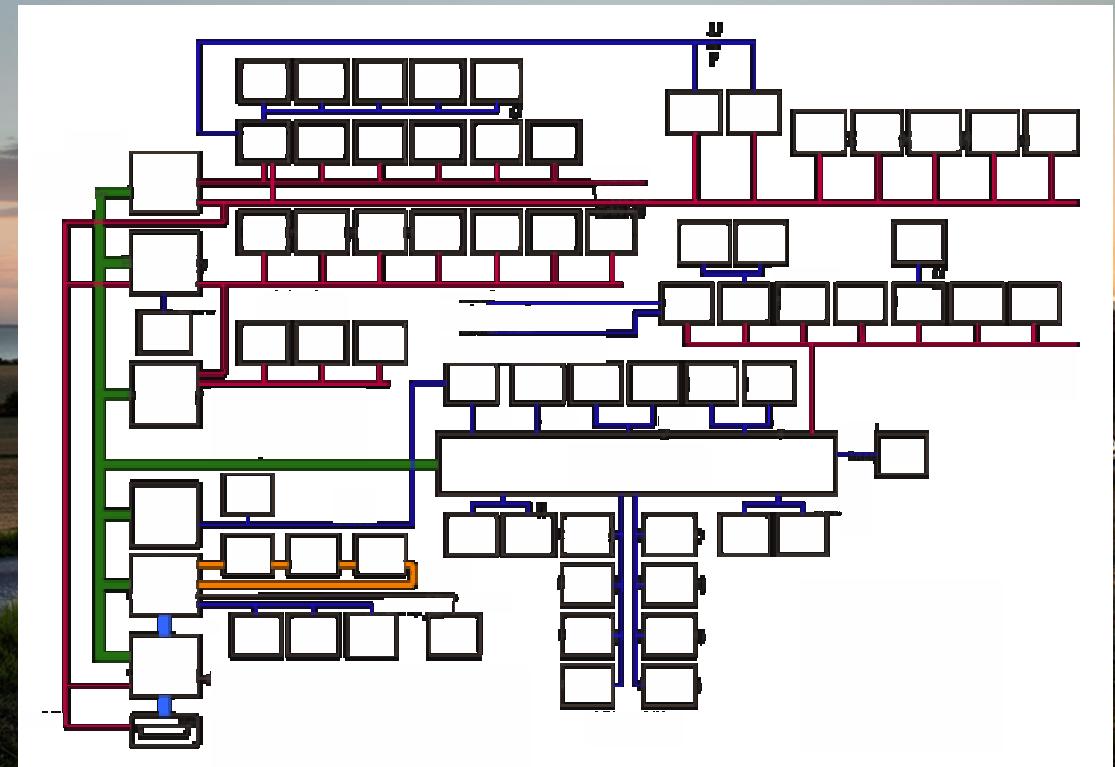


UNDER THE HOOD

Number of Electronic Control Units (ECUs) in cars

- 1998 - 19
- 2018 - >100

A lot of communication between ECUs!



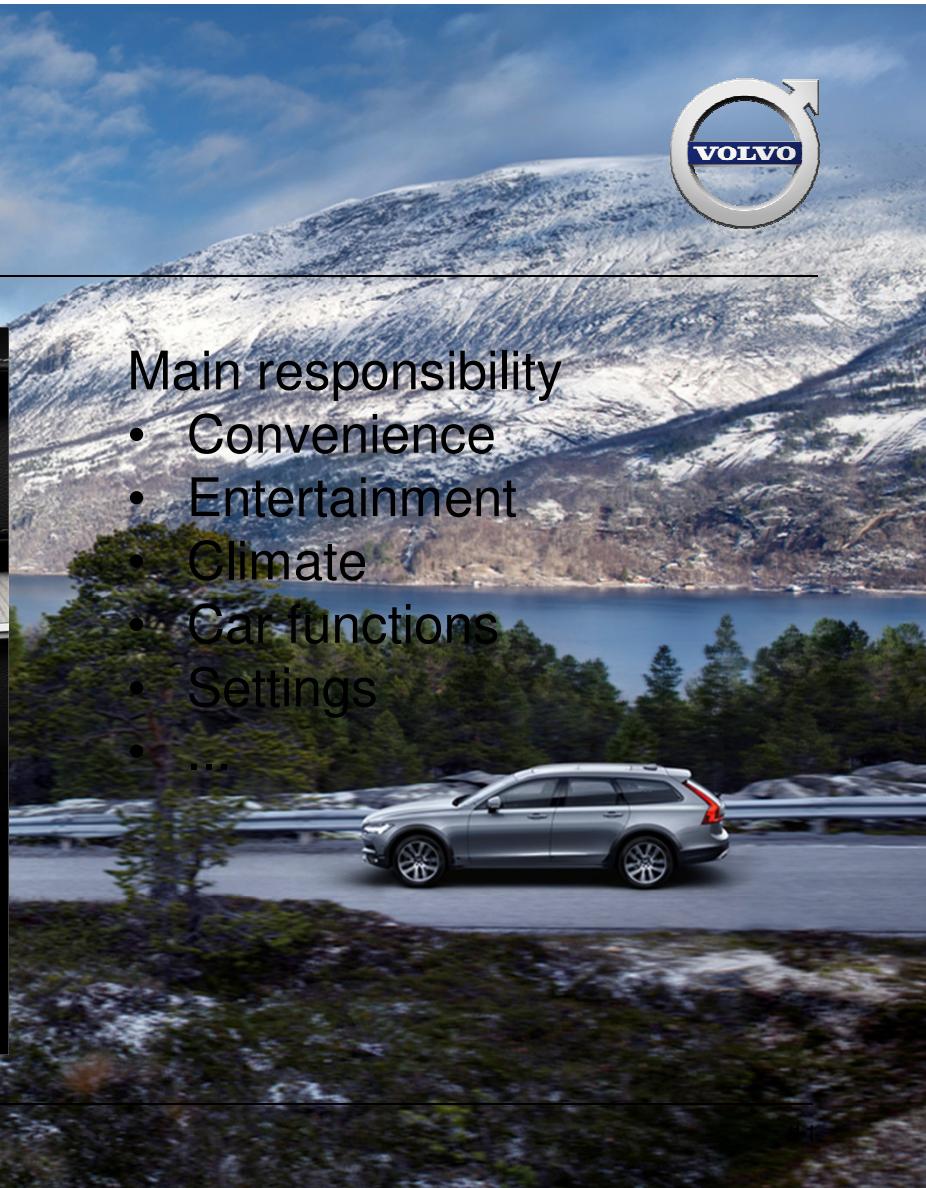


IHU - INFOTAINMENT HEAD UNIT



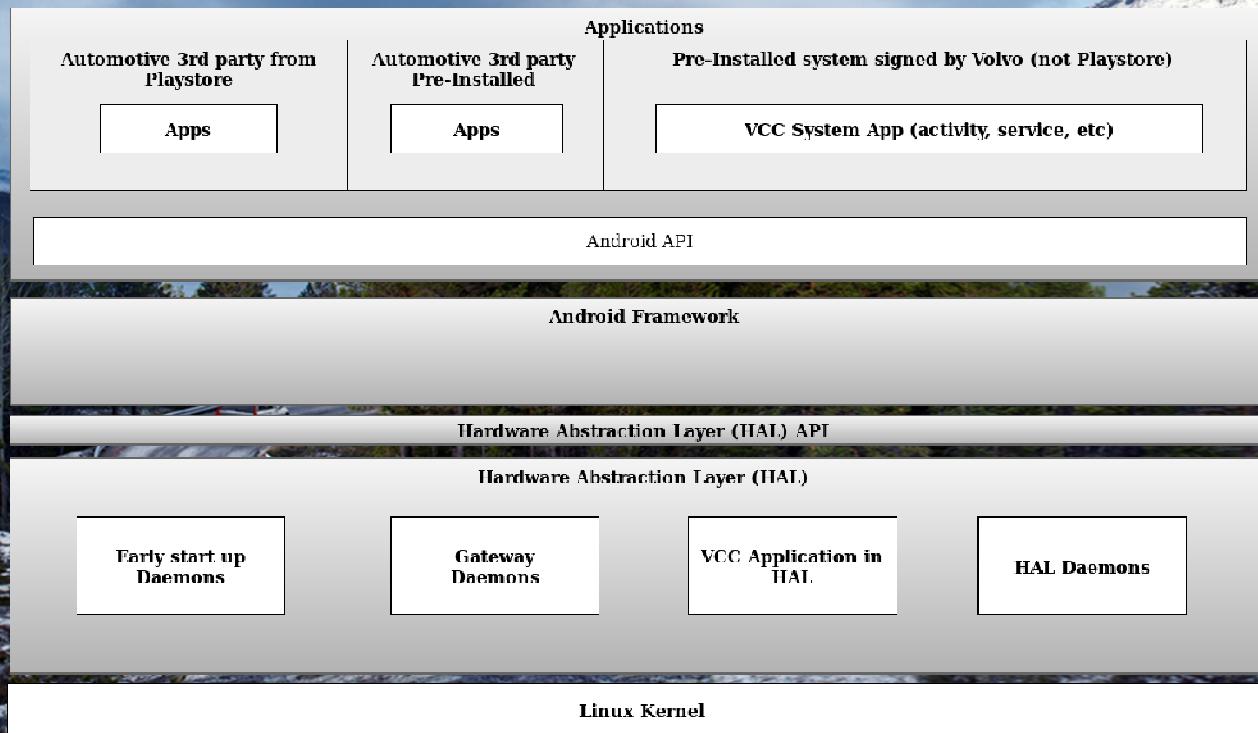
Main responsibility

- Convenience
- Entertainment
- Climate
- Car functions
- Settings
- ...





IHU HIGH LEVEL ARCHITECTURE



Type of applications:

- Spotify
- Audible
- NYTimes
- Waze
- Climate
- Radio
- Google Maps
- Google play Music



YOUR PROJECT

- Android app development
- We want you to find new ideas for apps in the automotive context



SOFTWARE DEVELOPMENT TOOLS

- Android studio
- Car API simulator(Semcon)
- apk as output





GUIDELINES

- Focus on daily commute
- Autonomous Drive mode available for parts of the journey
- Car sharing

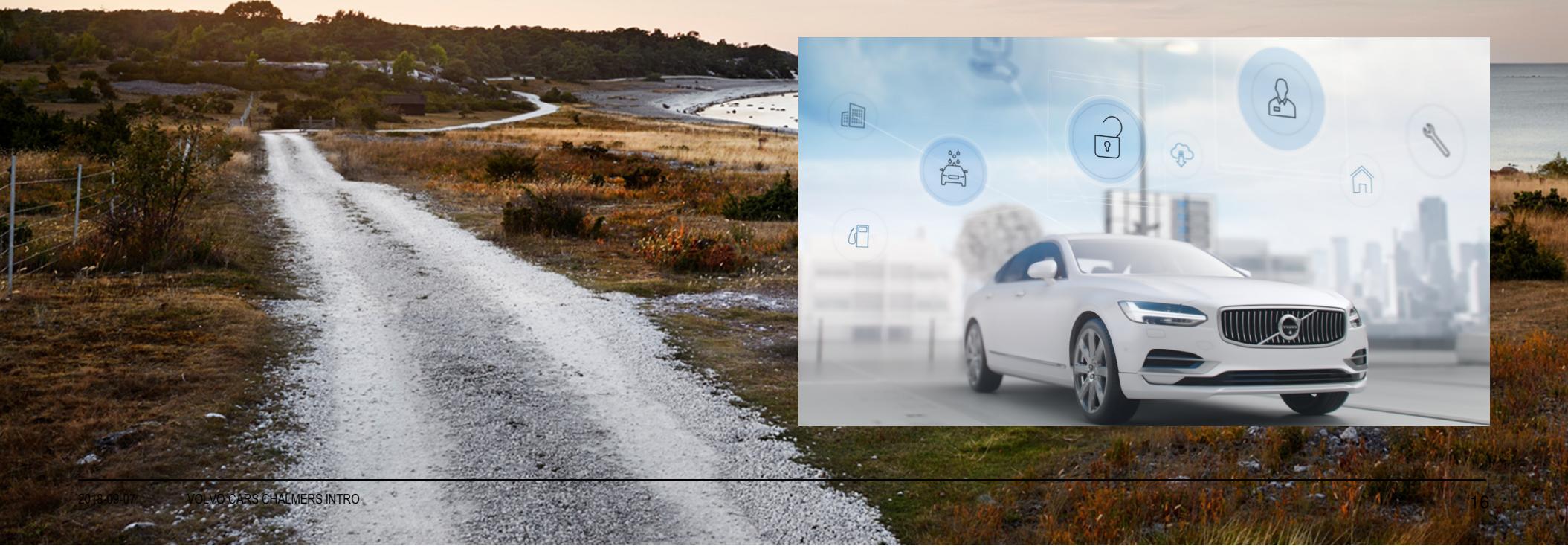
Good to know

- The typical journey is 30 minutes drive to work
- The typical user live in urban areas and is alone in the car
- The majority of the time is spent in congested roads



RESULT

- Besides the app itself
 - hopefully some great ideas for automotive!



THANK YOU

