

Albert Jordan

Technical projects at CloudCar

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Modular Head Unit Reference

A head unit reference design that allows hardware upgrades.

- Convinced NVIDIA to design a Tegra 3 compute fabric.
- Led design and implementation of a 1-DIN head unit prototype, with replaceable display and compute elements and installed in 20 cars.
- Negotiated a \$100K evaluation agreement with LG, which has led to a commercial development opportunity.



Connected Services Module



- Negotiated a \$50K Proof of Concept (POC) contract with Ford.
- Proposed a complementary modular hardware solution to Ford Sync enabling modern connected in car experiences.
- Architecture similar to CarPlay and Android Auto: leveraged specific CAN events to allow separation of audio and video focus so that native and connected services were seamlessly integrated.
- Demonstrated product at Ford's Silicon Valley inauguration event.

ASR Characterization for Service Launch in Germany

- Anticipated speech recognition challenges for launch of CloudCar's voice based consumer service in Germany: 80% of most popular media items in Germany are English/American, and popular restaurants/cafes in Germany have names with English words.
- Used Amazon's Ivona API to automatically generate test phrases which combined English and German words and which were based on Yelp and Last.FM market specific content. Developed Python test program that measured Nuance ASR accuracy on an iterative basis.
- Developed training and validation data and labels to improve accuracy of German Natural Language Unit (NLU).
- Proposed a scheme based on N-gram probability calculations to get past Nuance ASR limitations.



Android Auto

Industry's first commercial Android Auto receiver.

- Negotiated a \$200K POC contract with Hyundai.
- Managed delivery of a projected mode POC showcased at CES.
- Led the discussion with Google and Hyundai to propose an OAA compliant receiver architecture that leveraged POC.
- Program managed delivery of product to enable first Android Auto commercial launch.

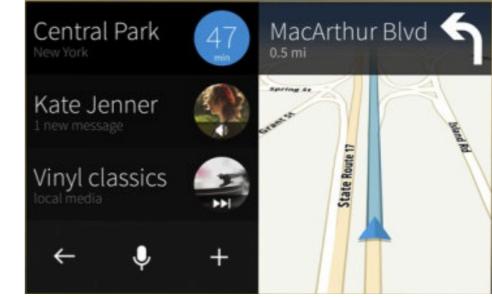


justDrive 1.0

A projected automotive experience.

Non modal, voice driven.

- Developed requirements that allowed transition of a demo to a commercial grade service.
- Acting VP engineering during Beta phase.
- Drove development of standalone validation tests to expedite integration with Nuance, Bosch, and HERE SDKs.

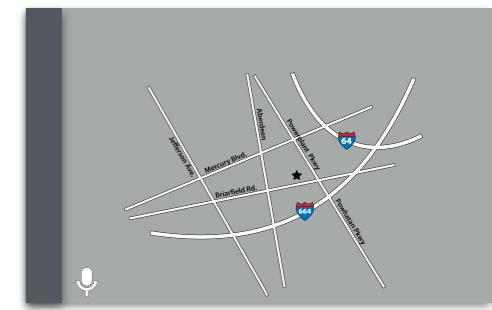


justDrive 2.0

Embedded product.

Open APIs to allow customizable HMI.

- Drove modification of UX to incorporate a consistent and predictive touch based HMI.
- Led discussions and negotiations with an OEM and Tier 1 to deliver a POC as a first step towards a commercial launch.
- Proposed architecture where connected features daylight via HTML5 surfaces overlaid on top of the native head unit HMI.
- Defined 20+ integration points with native navigation, media, comm, and audio resources to realize an integrated experience.
- Defined and prototyped in python range of algorithms for search, autocomplete, recommendations etc. to allow a simple touch interface approach.
- Drove the delivery of the first project milestone with a global automotive OEM.



Online Courses

- Artificial Intelligence for Robotics (Udacity)
- Machine Learning (Coursera)
- CS231n - Convolutional Neural Networks For Visual Recognition