Abstract
Modern production agriculture is beginning to advance beyond deterministic, scheduled operations between relatively few people to larger scale, information-driven efficiency in order to respond to the challenges of field variability and meet the needs of a growing population. Since no two farms are the same with respect to information and management structure, a specialized farm management information system (FMIS) which is tailored to individual farms is likely to be more effective than generalized FMIS available today. This approach resulted in the creation of the OpenAgToolkit (OpenATK) and a suite of task-specific, collaborative Android apps.

Customized FMIS

Task-Specific Apps
A task-specific, mobile apps approach
- Can provide a simple interface
- Is more likely to correctly infer contextual information without human input
- Makes FMIS economically feasible for smaller farms

Cloud Storage
Use of existing cloud storage
- Reduces startup costs
- Provides always on and updated data sharing
- Non-binary formats
  - Data is always represented in human-readable form in the backend

Future Directions
Field Notebook
- Keep track of your field data
  - Tile routing
  - Utility locations
  - Wet spots
  - Weed infestation
  - Crop conditions

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