

Data, methods, and tools	Foods, dishes, and recipes databases	Consumption and cooking database (What was consumed and/or prepared)	Inventory database(s) (Food in the fridge, food in the store)	Recommender system Recipes Recommender (RR) Consumption Recommender (CR)	Food preparation / cooking navigation system (Directions in real time)	Image recognition (Optical Character Recognitions)	Conversational Agent DSLs and dialogs design
Features							
Onboarding a person with peculiar: <ul style="list-style-type: none"> - Tastes - Health conditions - Allergies - Financial constraints - Time constraints - etc. 			Different ways of specifying what is user's pantry or refrigerator.	Proclaimed profile(s)		Figuring age, gender, and chronic disease.	Onboarding module for users
On boarding of foods, recipes, and inventory	Inserts/updates to the databases	Special handling for “unknown” foods and dishes	Inserts/updates to the databases	RR or CR can be used to support or speed-up the onboarding	Special handling for “unknown” ingredients.	OCR for names, ingredients, and related numerical data.	Onboarding module for foods, dishes, and inventory
Food preparation planning (What to cook next few day / weeks.)				Direct application with caveats. <ul style="list-style-type: none"> - Bias by proclaimed preferences and history consumption - Filtering to accessible (food) product and preparation tools - Time restrictions - Dietary restrictions - Financial restrictions 			
Knowing thyself Introspection module	The introspection module can use the those databases to produce nutritional data statistics (per user.)	What is most frequently consumed, cooked, purchased? Timelines for consumption of specified food types. Summaries for specified time intervals. Etc.	What kind of products you tend to: <ul style="list-style-type: none"> - Consume a lot - Buy and use a lot - Buy and not use often Where you buy? Etc.	The introspection can be done by examining the user profiles the recommender makes over: <ul style="list-style-type: none"> - Overall - Different periods of time 	Analysis of the interaction with the system: <ul style="list-style-type: none"> - Most frequent misunderstandings - Most frequent clarifications - Etc. 	Examination of image landscape from periodically taken pictures of: <ul style="list-style-type: none"> - Refrigerator content - Prepared / consumed food - Face 	Introspection module. For a given time interval find/show consumption: <ul style="list-style-type: none"> - Counts - Summary - Timeline(s)
Recipe recommendation For cooking	Standard utilization: <ul style="list-style-type: none"> - Ingredients nomenclature - Ingredients nutritional values - Ingredients substituted - Etc. 	Used to find: <ul style="list-style-type: none"> - General preferences - Current preference streaks - “Chef development” suggestions - Collaborative filtering suggestions 		Standard utilization			Commands for <ul style="list-style-type: none"> - Generic recommendations - Recommendations by profile - Recommendations by “crowd-sourcing”
Meals recommendation	Used in CR	Used in CR		Standard utilization		Recommending dishes by user submitted photos of dishes.	As above