Creating Robots with Toddler-Level Intelligence
Using the OpenCog AGI Architecture

Timeline / Milestones

H1: **May-Oct** **2013**	• Creation of prototype system using OpenCog to control Hanson Robokind • Initial integration of DeSTIN with OpenCog/Robokind • Improvement of OpenCog infrastructure for effective real-time robot control
	Milestone: Initial evaluation on WPPSI Verbal Vocabulary. Basic testing of OpenCog-powered Robokind for tabletop-based robot-human interactions.
H2: **Nov 13** **–** **Apr 14**	• Completion of DeSTIN integration • Testing and tuning of DeSTIN/OpenCog for object recognition from both pictures and physically present scenes • Testing and tuning of OpenCog for robot action control • Testing and tuning of OpenCog's PLN reasoning component for question-answering about commonsense objects, concepts and events • Teaching system to recognize everyday objects and events and their parts, via exposure to childrens' books and other similar materials containing labeled images
	Milestone: Initial evaluation on WPPSI Verbal Information, Comprehension, Similarity, Picture Naming and Receptive Vocabulary. Ability to follow simple instructions.
H3: **May –** **Oct** **2014**	• Eye-hand coordination for physical manipulation of objects, with a focus on tabletop situations • Experimentation with reasoning based on pictures (similarities, differences, categories of objects depicted in pictures) • Fine-tuning of action/dialogue schema for complex social interactions
	Milestone: Initial evaluation on WPPSI Picture Information, Picture Vocabulary, Word Reasoning, Matrix Reasoning, Picture Concepts, Picture Completion, Symbol Search, Coding. Ability to interact appropriately in

	task-based interactions with an examiner.
H4: **Nov 14** **–** **Apr 15**	• Experimentation with manipulation of objects • Learning about objects of various shapes and textures • Improvement of previously achieved capabilities, as needed
	Milestone: Evaluation on WPPSI Block Design and Object Assembly tasks.