

Project List: June 2003

Project Title	Description	Innovations	Completion Time	Most I
Map of the Web	Hypercard program to graphically represent the WWW as a street atlas	clever logic for street layout; new way to browse web	Convert to C++: 60 hrs; Improve: 60 hrs	Unknow
Binary Op-Code System	Command descriptor method that requires only 2 commands; possibly Turing complete	Possibly smallest Op-Code system ever; Speed as new MISC processor	Prototype Processor: 10 hrs; Create Compiler: 60 hrs	
ClockMaker	Educational mechanical system creation and modelling for clocks and similar devices	Efficient collision-detection and time-updating system; sophisticated physics-based coding structure	To simplified beta: 40 hrs; Packaged version: 200 hrs	
Evolutionary A.I.	Simple distributed background A.I. that uses G.A. system to predict data from web	True A.I. through self-prediction; Combination with web-crawling data-collection	Web-Based Packaged Version: 40 hrs	
Combined A.I.	Combined Concept-Network, systems, codelet, and G.A. approach to general prediction	OO Coding Innovations; Extension of Hofstadter to general A.I.	Destributed version: 40 hrs; Needed Human-Mind Subsystems: 60 hrs	
Nathe Programming Language	High-level, continuations-based, non-deterministic parallel programming language with programmatic data	Bindings as programs; Pattern-matching with non-determinism; Compilation as evaluation; Base types behaviours as infinite definitions	Flush-out Language: 25 hrs; Write Compiler: 80 hrs; Write White-Paper: 60 hrs	

Written Language	Human	Idea-based, writing-motivated communication structured down to sub-letter level ; Automatically-generated dictionary	Self-similar sub-letter to sentence structuring; Ability to create arbitrary new words; Speed and beauty in writing; Easy-to-understand writing and speaking system	Flush-out Language: 25 hrs; Write Booklet: 100 hrs
Mural-Maker Robot		Automated graphical image wall painter with algorithms for depixelizing and path-optimization	Image-to-woodcut decomposition; Automated painting	Rebuild Robot: 20 hrs; Improve Program: 40 hrs
Fractal-Planet Project		Programs to create and display fractal and evolved planets and EAPS systems	Combination of equations and tricks; Multiple-system integrator	Packaged System 1.0: 100 hrs
Desktop Sprites		Varied, interacting mini-A.I.'s on the desktop, with progressively more sophisticated behaviours	Web-based, automated sprite creator; Sprite interaction and evolution	Packaged System 1.0: 80 hrs
Java-Based Organizer		Expandable calendar, budget, and event-logistics tracker, with class and instance hierarchies	Java-code based extensibility; Integration of organizational systems; Strong structure for tracking organizing objects	Base System Completion: 40 hrs; Packaged System 1.0: 80 hrs
Darwin-Compressor		Reversible minimal instruction-set applied to evolving compression algorithms; Pentium optimization	Reversible, 1 byte op-codes; Evolutionary Optimal Compression	Packaged System 1.0: 60 hrs

Improved Rule	Slide-	Any-available function applied or inversed with solid and transparent disconnected siderule	Allow any arrangement with disconnect and transparency; Paper-thin calculation	Packaged System: 40 hrs
Streamboard		Keyboard generation based on optimizing “gliding” movement with shortest expected time	Efficient typing; Simulated annealing optimization	Packaged System: 60 hrs
Role-Playing System		More realistic, flexible, and systematic role-playing system based on 3rd ed. Dungeons and Dragons	Less arbitrary than D&D; Skill-based classes; Mental/Physical energy/level system; Less segmented combat	Write-up changes for v1.5: 20 hrs; Improve Document: 40 hrs
Web-crawling Background Graphics		Ever-changing background graphics with preference-affected web-crawling	Changing Background	Packaged System: 40 hrs
Automated Chatter		Eliza-like chat manager to handle away users with answers to frequent queries and discussion	Tie Eliza-chatter into organization manager	Packaged System: 80 hrs
Dual Clocks	Alarm	One clock with two alarms and other features in two, each password protected, for couples.	Password protected alarms; Doubled alarm-clock features	Prototyping: 12 hrs

Additional Projects:

1. **Economy/Society-structures Simulator**
Social structure prediction
2. **Book of Kings**
Mental archetype behaviours as people behaviours
3. **Preference-based Music Player**
Multi-tiered Probability-based system with learning of preference-interactions
4. **Web-Distributed Full-Featured Interactive Virtual World**
Efficient message propagation, user-based world creation, many interaction levels
5. **Young Person's Illustrated Primer**
Story creation from archetypes, plot-elements, and current user needs
6. **Rhythm-based A.I.**
Trend-finding with Fourier analysis and stimulus-response
7. **Evaluation-based A.I.**
Learning algorithms in recursive evaluation
8. **Miniature Building Blocks**
Cooperative using of abilities; combine bit of manipulation, memory, logic