

# Resumé of Lars Travers

[www.travers.org](http://www.travers.org)

## Current Skill Summary:

- Java, web services, XML technologies, XSLT, SQL
- JSP, JavaScript, HTML, CSS
- J2EE web applications
- GUI design, Swing, Java3D

I am a Harvard Extension [ALM in IT](#) candidate.

## President: Ace Coders, Inc. (2002-Present)

I founded [Ace Coders, Inc.](#) to bring together specialists in order to create the best possible websites and custom software for businesses, non-profits and educational institutions. Using Java/XML/XSLT/SQL I developed a content management system which uses a WYSIWYG editor to allow non-technical users to post news items, job listings, articles, etc. This system is running on [jomta.com](#), [maps-inc.org](#) and [siliga.com](#).

Also, I've been developing software displays using Java 3D for the Quantum Concepts project at the Science and Math Education Center at Boston University.

## Java Developer: Infinitemarket, Inc. (July 2000-August 2001)

Infinitemarket developed tools and services for creating fully customized and private-label websites where people could exchange information and products.

I created core software tools for sites like [Playcycle](#) and [Care Simply](#). Responsible for design and coding of "transaction model" and auction workflow.

- Developed fixed-price and auction transactions for online exchanges
- Developed module enabling users to post questions/answers to each item
- Designed and implemented module which handled time-sensitive events such as ending auctions
- Created a library of custom JSP tags to make functionality available to web designers
- Coded JavaScript client-side form validation

(Java/JSP/JDBC/SQL/JavaScript/Servlets/J2EE/JRun/CVS/Windows/Linux)

## Software Consultant (1982-2000):

- **Boston College, Department of Psychology (2000)**  
Created user interface for data analysis and display applet: [Davis Project](#) (Java/Swing)
- **Boston University, Science and Math Education Center (97-00)**  
Created user interface and VRML 3D molecular display for *Quantum Science Across Disciplines* project: [PolyAtomic Explorer](#) User could make [movies](#) such as [animated dipole](#) and [hydrogen pods](#). (Java/Swing/VRML)
- **Tufts University, Center for Science and Math Teaching (89-99)**

Designed and implemented software for physics education.

- Created four versions of *Vector Visualizer*<sup>®</sup>: interactive software which helps students understand mathematical vectors. This software runs in conjunction with tutorials created by educators. Includes a parser for vector equations, 3D display of vectors and allows students to directly manipulate arrows.
  - An applet with a better-quality [3D display demonstrated](#) vector operations e.g. addition, subtraction, cross and scalar products, components, etc. (Java/Swing/JavaScript/DHTML/VRML)
  - ActiveX control which could be dropped into the Tufts LoggerPro microcomputer-based lab or into a Microsoft application such as Word or Excel (Java/ActiveX bridge)
  - [OpenDoc component](#) which could be dropped into a spreadsheet. The 3D vector display was then linked via mouse drags to spreadsheet data. The vector display was then "run" to give a visualization. (C++/Macintosh)
  - An application with which it was possible to overlay movies of carts and balls with trails and arrows signifying actual collected velocity and acceleration data. (C++/QuickTime/Mac)
- Created interactive data analysis tools for *MacMotion*<sup>™</sup> (a *Computers In Physics* magazine Second Annual Contest award winner) and other microcomputer-based lab programs (C/Mac)

- **Sunburst Communications (88-89)**

Programmed [PlayWrite](#) for AppleII GS: software for reading and writing instruction. Students write scripts for animated puppets. When script is run puppets speak accompanied by special effects. Exhibited as *Puppeteers* in The Boston Computer Museum in 1989. (C/assembler/AppleII GS)

- **HRM Software (84-85)**

- Co-developed *Biofeedback MicroLab*<sup>™</sup>. Software analyzed Galvanic Skin Response, heart rate, muscle tension and skin temperature. Provided graphical feedback as well as euphonious synthesized sounds. 1987 *Classroom Computer Learning* "TOP SIX" Software Award of Excellence (Commodore64/Basic/assembler)
- Co-developed *Cardiovascular Fitness Lab*<sup>™</sup> which featured an animated heart which pulsed synchronously with the user's heartbeat and floated higher as the pulse quickened. 1986 *Classroom Computer Learning*. "TOP TEN" Software Award Winner (Commodore64/Basic/assembler)

- **Technical Education Research Centers, Inc. (82-88)**

- Modeling project (C/Mac)
- Keyboard emulator firmware for use by the physically impaired (Commodore 64)
- *Experiments in Science*<sup>™</sup> microcomputer-based lab software: 1985 *Classroom Computer Learning* Software Award Winner (AppleII/Basic)

- *Experiments in Human Physiology™* microcomputer-based lab software: 1985 Classroom Computer Learning Software Award Winner (AppleII/Forth)
- Temperature graphing software with animated thermometer: (AppleII/Basic/assembler)
- *S.C.O.P.E.™* microcomputer-based lab (AppleII)

- **Stanford University, Department of Physiology (82-83)**

- Heart rate/pulse amplitude collection and analysis software (AppleII/Pascal/assembler)

**Programmer: Cambridge Development Lab (Fall 81)**

Coded *microLab SYM Software™* microcomputer-based lab software for physics (6502 assembly language)

**Programmer: University of Massachusetts, Department of Computer and Information Science (80-81)**

Coded user interface for VISIONS image processing system (LISP/VAX)

**Programmer: Smith College, Department of History (79-80)**

Coded software interface between LISP relational database and Fortran statistics package (LISP)

**Programmer: Technical Education Research Centers, Inc. (Summer 1978)**

Coded character generator and drawing software sold with S100 video boards (CPM/Z80 assembly language)

**Teaching Experience**

- 1 week intensive LISP course at Smith College (80)
- 1 month intensive LISP course at Hampshire College (79)

**Academic History**

**Harvard University Extension**

- Groups, Graphs and Algebraic Structures for Computing
- Web Services
- Implementing Internet Protocols
- Developing e-Business Applications Using XML
- Object Paradigms: Design Patterns, C++ and Java
- Advanced Topics in Java and Distributed Computing
- Java for Distributed Computing
- Introduction to Database Systems and Client/Server Computing
- Theory of Computation

**Boston University Metropolitan College**

- [Interactive Computer Graphics](#)
- Computer Graphics

**Tufts University Summer Session**

- Applied Math for Engineers
- Statistics for Behavioral Sciences

- Algorithms and their Analysis
- [Design Science: Three Dimensional](#)
- Applied Statistics
- Principles of Physics 2: Electricity, Waves and Magnetism
- Linguistics/Cognitive Approach
- Logic

## **Hampshire College**

B.A. 1979, concentration: math and computer science. div 3 project: *Computer Model of the Human Parsing Mechanism*, a simulation of Dr. Lyn Frazier's "Sausage Machine" sentence processing model written in LISP.