

Home Address

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James A. Rising**Work Address**

Olin Way, #331
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PROFESSIONAL EMPLOYMENT

- August 2003 – Present – **Franklin W. Olin College** Electrical and Computer Engineering instructor, assisting classes in Discrete Signal Processing, Software Using Images and Sound, and Introductory Electronics. Research robot-human semi-autonomous navigation.
- Summer 2003 **iNeed.com** Programming full-time in Java, using Jakarta Struts and MySQL.
- Summer 2002 **Wave Arts, Inc.** Programmed full-time, in C, C++, and assembly, developing user-interfaces, signal processing functions, and patent research.
- Summer 2001 **Wave Arts, Inc.** Programmed full-time, in C, C++, and assembly. Developed optimized vector library for sound manipulation, including server-client options.
- Summer 2000 **EMC², Inc.** Programmed full-time, mostly in Visual C++ on products to archive, analyze, and display hardware configuration and databased performance data.
- Summer 1999 **Terascape Software** Programmed full-time, on various projects, including work in InstallShield, Unix scripts, Visual Basic, Java, Perl, Microsoft Access, and Oracle.
- January 1999 **D_xCG, Inc.** Designed report program for summarizing individual cost predictions for Medicare and other models into population-specific statistics.
- July 1997 – Mar 1998 **D_xCG, Inc.** Translated SAS source code for predicting medical costs into C with an emphasis on speed optimization and code readability.

EDUCATION

- 1999 – 2003 **Massachusetts Institute of Technology** Graduated in 2003 with a Bachelor of Science degree in Philosophy. Considerable course work in computer science, mathematics, and engineering.
- 1996 – 1999 **UMass Lowell** High school cross-registration: C++, statistics, numerical analysis.

COMPUTER EXPERIENCE

Programming Languages:

Considerable work in C, C++, Java, Scheme, Assembly, Hypercard, Matlab, SQL, PHP, and HTML
 Limited experience and work in Basic (QBasic, TrueBasic, Visual Basic), Perl, and SAS
 Familiarity with many more.

Experienced with Macintosh, PC, and Unix/Linux operating systems.

ACTIVITIES

- Summer 2004 **The STAND Project** Helped create online system for matching volunteers with organizations in swing states (using PHP and MySQL).
- Summer 2000 **Face Recognition UROP** Studied systems, methods, and theories for texture recognition, clustering algorithms, and wavelets, and implemented some of these for the identification of faces.
- 1999 – Present **Experimental Study Group (ESG)** Coordinated over a dozen seminars and activities on subjects ranging from future physics to literature readings.

NOTABLE INDEPENDENT PROJECTS

- 1999 – Present **Evolutionary AI** System for evolving programs to predict future data. Combined with WWW file collecting program, currently evolving general AI.
- 1996 – 1998 **Fractal Planet Project** Studied, worked with various equations, and wrote programs which created and displayed fractal planets in 3D.

REFERENCES

Jill Crisman Professor of Electrical and Computer Engineering at Olin College
 Contact at: jill.crisman@olin.edu, (781) 292-2519

Bill Gardner President of Wave Arts, Inc.
 Contact at: billg@wavearts.com, (781) 646-3794

Source code examples available upon request.