

## Adam L. Speight

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### Objective

To obtain a challenging short-term position developing software using object technologies

### Education

- **Ph.D. Mathematical Finance**, Carnegie Mellon University (part time)
- **M.S. Computational Mathematics**, Carnegie Mellon University, 2000
- **M.S. Operations Research**, University of Colorado at Denver, 1999
- **B.S. Mathematics with minor in Economics**, University of Colorado at Denver, 1997

### Work Experience

*Software Engineer/System Architect*  
Denver, CO

**Origin Interactive Inc.**  
**May 2000 – Present**

Responsible for architecting and developing a theme and content generation system for a company that manages multiple e-commerce enabled websites. System was architected using Java Servlets and XML/XSLT technology.

*Mathematics Instructor*  
Pittsburgh, PA

**Carnegie Mellon University**  
**Aug. 1999 – May 2000**

Taught multiple sections of a Calculus course to undergraduate students at CMU.

*Software Engineer*  
Denver, CO

**Raytheon Systems Company**  
**Sep. 1997 – Aug. 1999**

Responsible for developing software to be used in satellite mission management systems. The systems used integer programming and heuristic methods to schedule and make ad-hoc changes to allocations of ground and satellite resources. The code is composed of C++ and Java using CORBA and Object database technologies on a network of Sun servers and workstations.

### Technical Skills

Languages: Java, C++, Fortran, MATLAB, Perl, LaTeX

Technologies: J2EE (EJB, Servlets, JSP, JDBC, JMS),  
XML/XSLT, Cocoon, SOAP, CORBA,  
UML, Rational Rose, Rational Software Process

OS: Solaris, Linux, Irix, Windows NT

Other: Algorithm analysis and development, statistics, forecasting, optimization,  
mathematical methods for finance

### Refereed Publications

S.C. Billups, A. L. Speight, and L. T. Watson, 'Nonmonotone path following methods for nonsmooth equations and complementarity problems', M.C. Ferris, O.L. Mangasarian, & J.-S. Pang, eds., *Applications and Algorithms of Complementarity*. status: accepted.

### Theses

*Using Homotopy Methods to Solve Nonsmooth Equations*, Masters Thesis, 1999

*Results in Applying Linear Programming Methods to Abdominal Organ Segmentation*, Undergraduate Honors Thesis, 1997

**Presentations**

International Symposium on Mathematical Programming, Laussane, Switzerland, *Linear Programming, Textural Information and Organ Segmentation*

**Awards and Honors**

Awarded a VIGRE fellowship by the mathematics department at CMU  
B.S. degree granted with Magna Cum Laude honors

**Security Clearance**

Single scope background investigation (SSBI)