

**Brooke Nicole Chenoweth Creel**  
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**Technology:** C++, Java, Python, Scheme, XML, Netbeans, Subversion

**Professional Experience:**

ARES Corporation, Albuquerque, NM March 2008- Present  
Senior Systems Specialist

- Programming agent-based security simulation software in Java
- As part of a CMMI level 3 certified software development group, I have been involved throughout the software development process: including design, specification, implementation, review, debugging, and user support.
- Designed and implemented multi-threaded path finding algorithm

Sandia National Laboratories, Albuquerque, NM December 2003-November 2007  
Computer Programmer

- Programming models and simulations in several languages (C++, Java, Python)
- Designed and implemented an agent-based logistics simulation (C++, XML)
- Extended genetic programming engine to evolve programs to compete against human-written players (C++, Java)
- Implemented parallel clustering algorithm in C++ using MPI
- Created Java GUI wrapper for an R sensitivity analysis package using NetBeans IDE

Indiana University, Bloomington, IN Summer 2001, Fall-Spring 2000-2003  
Assistant Instructor in Computer Science Department

- Supervised labs/discussion sessions, graded assignments, guided students

Indiana University, Bloomington, IN Spring 2001  
Research Assistant in Computer Science Department

- Explored Morton ordered matrix representation for Professor David Wise
- Implemented intermediate language for C compilation using Scheme records

University of California San Diego, San Diego, CA Summer 1999  
Computing Research Association Distributed Mentor Project

- Under the guidance of Dr. Jeanne Ferrante, implemented algorithm for storage mapping of loops
- Independently researched methods of extending the algorithm to n dimensions
- Presented results and findings to a panel of faculty and students

**Education:**

MS in Computer Science, 2002  
Indiana University, Bloomington, IN

BS in Computer Science, Double Major in Mathematics, 2000  
Rose-Hulman Institute of Technology, Terre Haute, IN