

Objective	To obtain a challenging computer science position where I can not only code but also can utilize my technical, leadership, and communication skills.
Education	Pennsylvania State University, University Park, PA (2001-2005) <ul style="list-style-type: none">• Simultaneously achieved B.S. in Computer Science, M.S in Computer Science and Engineering through Integrated Undergraduate/Graduate (IUG) program• Schreyer Honors College scholar• Graduated With Distinction, GPA: 3.75/4.00• Dean's List, 6 semesters• Member, Tau Beta Pi National Engineering Honor Society
Work experience	Software Developer, Traffic.com/NAVTEQ, Wayne, PA, January 2006-present <ul style="list-style-type: none">• Developed and maintained Media Trafficking Information System (MITS), which tracks sales of, schedules, postlogs, and bills 120,000 radio and television commercials per month• Product supports 90% of company's revenue, responsible for \$50 million in sales/yr• Only developer working on project during successful transition from four years of development to production use• Worked alone or with up to four people on project team• Project uses Visual Basic .NET, SQL Server stored procedures and triggers, Crystal Reports, and more• Develop both GUI and backend database• Assist end-users with issues and managed priorities of outstanding bugs and new features• Gathered user specifications for and programmed complex copy-assignment algorithm• System never crashed, lost data, or lost revenue during my entire tenure Software Engineer/Researcher, Applied Research Laboratory, State College, PA, May 2004-January 2006 (see "Research Experience" for more information) <ul style="list-style-type: none">• Developed graphical simulation for autonomous helicopter missions using C++ and Visual Basic in a team environment• Researched query indexing structure to facilitate access to large terrain data Software Developer, Creative Designer, and Video Editor, Penn State Office of Admissions, Abington, PA, January 2003 – January 2005 <ul style="list-style-type: none">• Conceptualized and developed software for the "Freshmen Feud" gameshow; highest ratings in history of orientation program from students and parents• Taped, edited, and produced twelve videos of programs and designed distribution website• Redesigned orientation slideshow by editing pictures, rewriting text, and selecting music Database Developer, Penn State Abington Career Services, Abington, PA, Nov. 2002 – 2005 <ul style="list-style-type: none">• Designed software to maintain internship databases and automate 40+ page yearly report on graduates of the University• Developed web-based survey site using Access and PHP• Analyzed and implemented security requirements for database frontend• Used Visual Studio .NET and SQL to automate Microsoft Office applications Orientation Leader, Penn State Office of Admissions, Abington, PA, Summers 2002-2005 <ul style="list-style-type: none">• Utilized public speaking skills to emphasize Penn State activities to audiences of hundreds• Greeted and address parents' concerns at Orientation sessions Server/Takeout Specialist, Olive Garden Italian Restaurant, Abington, PA, May – December 2002 Computer Assistant, Environmental Protection Agency, Philadelphia, PA, May – August 2001

Computer skills	<p>Software Experience – Expert Level</p> <ul style="list-style-type: none"> • 10 yrs Visual Basic 6/.NET • 5 yrs SQL, 2 yrs C/C++ • 2 yrs PHP • Frontpage, Dreamweaver • 4 yrs automation of Microsoft Office • 7 yrs networking, Internet, HTML, and domains • 4 yrs Sony Vegas, Pinnacle Studio 10, and video Editing techniques <p>Software Experience – Basic</p> <ul style="list-style-type: none"> • Java • 68HC12 + MIPS assembly • Security and cryptography • Networking, Internet, HTML, and domain registration • OpenGL and computer graphics algorithms • Crystal Reports and ActiveReports
Courses and projects	<p>Visual Basic and C++ Programs, 1996 – present</p> <ul style="list-style-type: none"> • Created over 30 programs ranging from shopping lists creators to full-featured video games • Applications have been downloaded over 60,000 times at www.shoemakervillage.org <p>Shoemaker Village website, 1998 - present</p> <ul style="list-style-type: none"> • Created and maintain website for magazine and software at www.shoemakervillage.org • Configure servers and develop pages using raw HTML code and web design software <p>Research Experience</p> <ul style="list-style-type: none"> • <i>Chronological E-Mail Security</i> (with P. McDaniel) – created system that uses hash functions and cryptography to verify E-Mail sender identity without server intervention • <i>Dual-Grid Query Indexing</i> (with W.C. Lee) – created new spatial database index to aid autonomous helicopter navigation <p>IT-Related Courses (* indicates graduate-level course)</p> <ul style="list-style-type: none"> • Algorithm Design I, II* • Advanced Computer Security I*, II* • Programming Techniques I, II, III* • Honors Robotic Design • Microcontrollers and Embedded Design* • Calculus and Analytic Geometry I, II, III • Database Management Systems I, III* • Probability and Statistics I, II • Technical Writing • Superscalar Processor Design*
Extracurricular activities	<p>Penn State extracurricular activities</p> <ul style="list-style-type: none"> • Producer, Penn State Network Television, 2004 • IT Specialist, Council of Commonwealth Student Governments, July 2003 – January 2004 • Public Relations Officer, Penn State Student Government Association, October 2001 – May 2003 • Event Coordinator, Penn State Abington Lares Union Board, March 2002 – May 2003 <p>Community Leader, Activeworlds, Inc., July 2000 – July 2002</p> <ul style="list-style-type: none"> • Activeworlds is an online community enabling people from around the world to exchange new ideas around areas of common interest using virtual reality tools • Lead group of 35 to moderate, secure, and improve technical and interpersonal environment • Organized and directed events attended by hundreds of participants • Wrote award-winning event-specific and community-building software • Increased online usage from 5 to 75 people online at any given time <p>Shoemaker Village magazine, May 1993 – March 2001</p> <ul style="list-style-type: none"> • Created the variety magazine in May 1993; archives at www.shoemakervillage.org • Monthly magazine received contributions from youths and adults from as far away as England • Organized staff of ten members in publishing installments averaging 45 pages <p>The Knights of the Square Table, wrote 360-page novel, May 1997 – January 2002</p> <p>Timekeeper, scorekeeper, referee, database and website developer, Upper Moreland Hoops basketball, Oct. 1993 – present</p>
Awards	<p>Cy Award for Technical Innovation, September 2000</p> <ul style="list-style-type: none"> • Awarded by community vote of thousands, earned for “Ultimate Paintball” software