

SEAN CHRISTOPHER ALAN NICHOLS

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EDUCATION

The University of Calgary Calgary, AB • Bachelor of Science, 2005

Major in Computer Science (Concentration in Theory of Computation), Minor in Pure Mathematics

• Selected Coursework:

Computer Science Compiler Construction and Optimization · Functional Programming · Data Structures · Complexity Theory · Automata & Computation · Operating Systems · Natural Language Processing · Algorithms · Software Engineering · Type Theory

Mathematics Category Theory · Multivariable Calculus · Discrete Math · Abstract Algebra

WORK HISTORY

University of Calgary (2006)

Teacher's Assistant

- Instructed students in functional and logic programming paradigms.
- Set and graded coursework, conducted formal tutelage in the form of office hours and exam review sessions.

Alberta Wilderness Association (2004 - Present)

Software Developer

- Designed, implemented and maintained database software to keep track of association membership and charitable donations, and to interface with accounting software for the purposes of financial reporting.
- Designed, implemented and maintained software to manage and coordinate event registrations, including charity auction receipting and pledge sponsorships.
- Designed and implemented informative and interactive “kiosk” software used at public events to inform browsers about the association.

American University of Sharjah (2002 - 2003)

Teacher's Assistant

- Instructed students in object-oriented programming methodologies.
- Set and graded coursework.

American University of Sharjah – Office of Student Affairs (2002 - 2003)

Software Developer

- Developed and maintained a suite of databases to keep track of and report on all student employment, club participation and events, and other activities on a university campus of 4,500 students.

RapidIAS, Inc. (2000 - 2001)

Software Developer

- Developed QuickADS, a windows-based point-and-click interface to CHCS, a VAX mainframe-based medical database used by US Department of Defence installations world-wide.
- Developed applications to assist in testing and designing remote location abilities for US Wireless. These include database applications to maintain test data and network applications to efficiently collect test data from roaming devices.
- Designed and completed web interfaces to CHCS for specific DoD installations on a per-request basis.

Attachmate Canada, Ltd. (1997 - 1999)

Intern

- Instrumental in the design, program and development through to completion of a user-friendly GUI interface for an online medical database for a large corporate client.
 - Participated in the design and development of an office-wide Windows Application to allow employees to manage their time and projects. This involved integration with several Microsoft applications such as Project, Access, Outlook and Excel.
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SKILLS

- Proficient with software development in Java, C, C++, C#, Visual Basic, Haskell, PHP, Python, Prolog, Perl, Lisp, Fortran and Assembly on Intel and SPARC processors.
 - Proficient with Compiler Design, Parsing, Regular Expressions, Database Design, HTML, SQL, ASP, L^AT_EX
 - Proficient with Linux and other UNIX, X, Win32, MacOS, OS/2.
 - Fluent in English and French, with some capability in German, Arabic and Russian.
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HONORS AND AWARDS

- Awarded Dean's List standing at the University of Calgary 2004.
- ACM International Collegiate Programming Competition UAE national champion 2002.
- Fermat Canadian Mathematics Competition: BC Honour Roll, American High School Mathematics Examination: 17th in BC, Euclid Canadian Mathematics Competition: BC Honour Roll in 1995.