

Neil Brandt

Educator and Software Engineer

Professor, part-time, Sheridan College, Pilon School of Business.

M.Sc. Mathematics and Bachelor of Education degrees.

19 years of professional experience in software engineering, spanning many technologies, industries, company sizes, software life-cycle stages, and methodologies. Tech highlights: web-app client and server architecture and development, database design, javascript, css, java, ruby, SQL

Life-long commitment to social justice with broad experience in volunteer organizations.

Education

B.Ed., University of Toronto OISE, 2006
Qualified in Intermediate/Senior Mathematics and Computer Science

M.Sc. Mathematics, University of Toronto, 1996

B.Sc. (First Class) Honours Mathematics, University of Victoria, 1995

B.Music (First Class), University of Victoria, 1993

Employment Experience

Professor, part-time, Sheridan College

Oct. 2017 - present

Teaching mathematics in Sheridan Faculty of Business.

Educator (contract), Seneca College Continuing Education

Aug. - Sept. 2017

Planned and delivered SQL training for an external client

Professor, part-time, George Brown College

Oct. 2016 - July 2017

Teaching mathematics in Academic Upgrading (School of Work and College Preparation).

Shotgun Software (Part of Autodesk Inc.)

Principal Software Engineer

June 2006 - June 2015

Tech: ruby, rails, javascript, HTML, CSS, SQL, JSON, python, linux, postgres, web app security, agile, git, subversion

As one of the original engineers at Shotgun Software, for 9 years I played a primary role in the architecture and development of the company's industry-leading production management web application for special effects, animation, and game development, with major clients like EA Games.

During 8 years we grew from a 4-person start-up to an independent company with 30 employees and 500 client studios. In 2014 we made a very successful transition, doubling the team size, when acquired by Autodesk Inc., the world's leading design-focused software company.

As a senior software engineer, I collaborated in all major architecture decisions, and I designed and implemented many key components of our innovative and successful product.

CORE Feature Animation (Toronto, ON)

Asset Management Software Engineer

Oct. 2003 - July 2005

Tech: java, javascript, HTML, CSS, SQL, postgres, python, perl, cvs

At CORE, our team built an asset management web application for a Disney animated feature film project. Our integration with diverse 3rd party software for film animation processes was essential to the efficiency and ease of use of the complex feature-film animation pipeline.

In my role, I designed and wrote software on a team of 4 - 5 engineers. We also provided hands-on support for 300 artists and supervisors. I trained groups of newly hired artists to use our tools.

IPDevCo Inc. (Toronto, ON)

Game Server Architect and Team Lead

July 2000 - Oct. 2003

At IPDevCo, as game server architect and team lead, I was responsible for design changes to make a simple java casino game server prototype into a scalable server system. By the time I left, the game servers were stable, accurate, reliable, and maintainable under stringent real-time performance conditions.

Another part of my role was to effectively communicate to management the mathematics of game design decisions. With my mathematics background, I introduced better probability modelling of new games we implemented, improving business decision-making in this area.

In my role as team lead, I mentored new employees and taught and promoted better development methodology. Because of the central position of game servers among our systems, my role also included extensive coordination and facilitation among other groups.

Maves International Software (Richmond Hill, ON)

Development Tools and Utilities Engineer
Oct. 1996 - July 2000

Maves is a software provider to the 3rd party logistics industry. In my role on the R&D team I designed and created new tools and utilities for the company's application developers, and a new platform for modular client customization and custom reporting.

I planned and conducted training of developers in the use of the new tools and platform. I also represented the development group in the process of designing and documenting ISO 9000 procedures.

Teaching Assistant, University of Toronto
(Sept. 1995 - May 1996)

Taught weekly tutorial for undergraduate students in second-year calculus

Teaching Assistant, University of Victoria
(May-June 1995)

Taught weekly tutorial for undergraduate students in second-year differential equations