Mclean Edwards

PROFESSIONAL DESCRIPTION

Algorithm strategist with over 15 years of combined experience in mathematics research, computer programming, and business consulting and operations. Combines a strong intuition for algorithms, probability, and code with enough business experience to focus on what really matters.

Work Experience

President Syndemedic Inc.

2013-2019

A long term project to create new algorithms for drug discovery and biochemical simulation.

- research and development of over a dozen algorithms
- scientific and database programming in Python, C, and on GPUs
- leading a small team of researchers and programmers

Postdoctoral Fellow Biochemistry and Biomedical Sciences, McMaster University 2015-2016

Created and enhanced new algorithms and software for predicting chemical products from partial or complete DNA sequence information. Work on DNA sequence reconstruction.

Data Science Consultant (Independent)

2013, 2017

Consulted on algorithm use for marketing, user experience, business strategy, and 3D reconstruction technology.

- designed and refined prediction engines
- advized on and built technological roadmaps
- applied orthogonality concepts to accelerate machine learning

CEO Intermobile Solutions Inc.

2012 - 2013

Incorporated and managed the Canadian arm of a small software development and consulting startup, specialized in mobile and web-based social networking applications and cloud computing.

VP Marketing InterMobile

2009 - 2010

An early-stage mobile development firm developing 'iTryst', a mobile dating platform.

- brand development, design, and advertising
- aided business strategy

Software Consultant Department of Mathematics, University of British Columbia 2009

Developing and extending Perl software for existing and new computer lab assignments for two courses in 'Calculus for the Life Sciences'.

- created new computer lab assignments
- applied Python, Perl, and shell scripting to automate problem and solution generation
- fully automated per-instance instruction, marking guides, and graph diagrams

COMMUNITY INVOLVEMENT

Community Theatre

Dead On Nine, Century Church Theatre, male lead, 2015

The Premature Corpse, Century Church Theatre, secondary lead/supporting role, 2016 Fatal Attraction, Century Church Theatre, nominated for best supporting actor, 2018

EARLY LIFE EXPERIENCE

Developed Java applets for math research, marked exams, president of various student clubs, conducted telephone surveys in French, public park and road maintenance, hobbyist programming, and research in nuclear reactor safety.

EDUCATION

University of British Columbia, Vancouver, BC, CA

Ph. D., Faculty of Graduate Studies (Mathematics), November 2013

University of Guelph, Guelph, ON, CA

M. Sc. with Thesis, Applied Mathematics, August 2005

H. B. Sc. with distinction, Mathematics, October 2004

Pre-University

Diploma in Scientific Writing, Red River College, Manitoba, 1998 Bilingual Certificate, Chippewa High School, Ontario, 2000

OVERVIEW OF SKILLS

Scientific and numerical computing experience in multiple languages: Python, Java, C, Perl, Javascript, Maple, and Matlab.

Experience writing software for algorithm and data visualization in 2, 3, and 4 dimensions.

Specialized in mathematical analysis and optimization algorithms, using iterative methods for the best approximation of optimal solutions.

A wide mathematical background, with training in differential equations, probability theory, statistical inference, and differential geometry.

Experience in developing startup business.

Years of experience from hobbyist programming and being a linux enthusiast.

Experience implementing and improving upon machine learning techniques.

A good intuition for how algorithms work and their real-world impact and implications.