

Sharlene Carlson

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1990 / BAsC / ENGINEERING ELECTRONICS, SIMON FRASER UNIVERSITY



Sharlene Carlson is a contemplative mother, citizen, adventurer, and engineer.

Since graduating she's turned her passion for understanding systems both inwards and outwards. She's very grateful for the keen analytical mind and curiosity honed at Simon Fraser University where she graduated on the Dean's List with a BAsC in Engineering Electronics. At the Engineering Centennial she asked for the best place to work in Canada and followed the answers to Nortel.

As a Co-op student she wrote code to allow phone lines to carry internet signals (yes, that was cutting edge technology once), and as a new graduate had the opportunity to see many aspects of microelectronics development through a mentorship program. Her inner geek was delighted to see Fourier transforms while doing product engineering work with Surface Acoustic Wave (SAW) devices and impressed by the enormous talent of many women doing assembly work who were sometimes without a voice. She had the opportunity to work with an extraordinarily talented group of engineers on the production of Broadband Microwave radio systems, and then transitioned to Product Management for Optoelectronic Components at a time when Canada had its own design and fabrication facilities for the fastest technologies currently in development (10 GB/s). As a product manager in the telecommunication boom years she oversaw program management, product development and new product introduction for devices as small as a gain block and as complex as 10 GB/s transceiver modules, and at the peak of production held a portfolio of high speed optoelectronics products worth over \$500 million in annual sales, but her greatest satisfaction was working with the diverse and dedicated mix of people bringing those products to production. She's very grateful for the

focus, dedication, and ability to analyze information that came from her engineering training, and for the experience of working with some of the best and brightest designers in high speed communications. Working with a dedicated and talented group of people towards a common goal is a tremendous gift, and engineering brought many such opportunities.

Now motherhood requires everything she's learned and more, and she finds the questions around what it means to be a good citizen in a global world more important than ever. The challenges ahead require enormous collective effort, and the types of thinking required to solve current problems are different than the ones that created them. With the 30 year anniversary of the Montreal Massacre, an atmosphere of polarization and populism in politics, and the urgency of action required on climate change, she finds the words of a young woman in Nazi Germany, Etty Hillesum, especially relevant, "Each of us must turn inwards and destroy in [ourselves] all that [we think we] ought to destroy in others. And remember that every atom of hate we add to this world makes it still more inhospitable." The ability to listen to those different from us and develop sustainable political and human systems that recognize and support our interconnectedness is essential.