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CCPE - MANULIFE FINANCIAL SCHOLARSHIPS

The CCPE-Manulife Financial scholarship recipient, Rajiv Iyer, P.Eng., compares his research of the photonic device known as the integrated non-linear semiconductor micro-resonator to the invention of the transistor, perhaps the most important electronics invention of the 20th century.

A member of Professional Engineers Ontario, Rajiv believes that addressing the tight specifications of the integrated non-linear semiconductor micro-resonator could be a key breakthrough in technology; much the same way the transistor transformed our electronic world over 55 years ago.

Rajiv earned his bachelor's degree in electrical engineering from the University of Toronto, and received an NSERC scholarship to pursue his master's degree at a Canadian university.

After accepting an attractive job in Vancouver to gain practical industry experience, he decided to pursue his master's degree at McGill University, specializing in photonics.

Master's in hand, Rajiv began working at JDS Uniphase as an optical components designer. The experience was invaluable in building his understanding of the design of engineering and photonic components. However, he had the desire to pursue his studies further and returned to school in 2002 to undertake a PhD.

Now a full-fledged PhD student at the University of Toronto, Rajiv is concentrating his efforts on proving the viability and practicality of VLSI optical circuitry, employing nonlinear micro-resonators to propel the next generation of telecom devices.

It is Rajiv's hope that his research will lead to the creation of solutions that handle our ever-increasing Internet traffic, and ultimately lead to an advancement of novel devices using photonic technology.

Upon graduation, Rajiv would either like to teach at the university level, or contribute to society by applying his knowledge to help revive the sagging telecom industry.

