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| Inderpreet Singh |  17 Acadian Hts, L6Y 4H5, Brampton  416-543-0144 Inderpreet.v1@gmail.com  linkedIn.com/in/inderpreets  inderpreet.github.io |
| Skilled Engineering Professional with a Masters in Engineering and 8+ years of experience in designing, testing and deploying Embedded High-Performance Firmware and Hardware. Effective in digital and analog electronic systems design with strong core fundamentals. Proven track record with CAD tools and simulation tools for electronic system design validation with a background in teaching and training. |

# Experience

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| February 2017 – CURRENTContributor-at-large, Hackaday.comContent Writer, contributing detailed tutorials and short original content on recent technologies |
| July 2012 – july 2018 Chief Design Engineer, Rajdeep Info Techno Pvt. Ltd, India* Embedded Solutions Architect: Responsible for converting user requirements and designing hardware and firmware including component selection for new products.
* Team & Project Management: Training and mentoring technical teams for new challenges.
* Firmware: Writing mission critical firmware and protocols for microcontrollers and Linux.
* Software: Writing test scripts in Python for integrating hardware with computers and networks.
* Communication: Point of contact between multiple stakeholders including Upper Management and Software and Hardware Teams for developing solutions.

April 2009 – June 2010 Team Lead Electronics, Rajdeep Info Techno Pvt. Ltd, India* Technical Lead: Responsible for coordinating and training teams for Embedded Dev. Group.
* Product Realization from Design: Executing projects within scope, scheduling and budgeting
* Firmware Development: Writing and overseeing the testing & validation of Firmware for mission critical control systems.
* Product Support: Providing site assistance and improvement in existing solutions and quality assurance.

January 2008 – March 2009 Development engineer -Electronics, Rajdeep Info Techno Pvt. Ltd, India* System on Chip Design: Designing SOC systems in Verilog HDL and C++ using Altera Quartus II and NIOS II Softcore Processor
* Board Bring-up: Designing and Testing 2- and 4-layer PCBs for control and automation products
* Product documentation for relevant projects.

July 2006 – January 2008Research assistant, International Institute Of Information Technology, India * Delivering course curriculum in classroom as well as lab sessions for ASIC design.
* Course Material audits and Lab session design.
* Evaluating practical exams for Digital design courses.
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# Education

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| July 2010 - June 2012Masters of technology – Communication systems, Guru Nanak dev university, India* CPGA 8.4/10 (Equivalent to 74.3%)
* Credentials Assessed by World Education Services, Canada
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| July 2002 - June 2006bachelor of technology – electronics and Communication Engineering, Punjab Technical University, India* 77.71% (Equivalent to 2.8 4.0GPA)
* Credentials Assessed by World Education Services, Canada
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# Skills

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| Programming LanguagesEmbedded C/C++, C++14, Python 3, MATLAB, NodeJS, VerilogHDL, BASH Scripting, HTML/CSS/JS, OpenCV, TensorFlow |
| HardwareARM Cortex M0, M4, AVR, MSP430, Intel x86 - IoT 2020, SiLabs 8051, TI CC3200, ESP8266, Raspberry Pi, Hardware Acceleration |
| ProtocolsI2C, SPI, UART, TCP/IP, MQTT, Bluetooth, RF Communication, Custom Protocol Stacks for POSIX and Embedded Systems |
| Board Bring-up and SimulationAutodesk Eagle, KiCAD, Cadence OrCAD, LT Spice, Autodesk Fusion 360(3D Modelling) |
| Software Tools and OSSPICE, Linux(Kernel Modules and drivers, threads, Make), Git(Github and Gitlab), IntelliJ IDEA, OpenCV, Spring Boot, Eclipse, Visual Studio Code, Microsoft Office, Android Studio, LabView, Jira Software, Asana, Slack, Google Suite, Adobe Photoshop |

# CERTIFICATIONS

## IELTS, General (May, 2017)

Listening 8.5, Reading 8.5, Writing 7.5, Speaking 8.5