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| --- | --- |
| Computer Engineer  Nick Houghton | Phone: (250)893 1988 | Email: nhoughto@uvic.ca  Address: 4962 La Quinta place, Victoria, B.C. Canada |

# Skills

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| Programming  C, C++, Java, Python, HTML, CSS, MATLAB, VHDL | Mathematics  Single and multi-variable calculus, differential equation, discreet mathematics Donecblanditfeugiat | Encryption  Fully homomorphic encryption design |
| Processor Design  VLSI processor design using VHDL, Application Specific Design | **RESEARCH**  Independently provides timely and actionable findings, thorough documentation, strong written and verbal communication of findings. | First Aid  CPR, spinal injury management, incident management, patient care |

# Academic Experience and Projects

EPASP: Embedded Platform for Audio signal processing

*CENG 499: University of Victoria 2014*

* Specification and Schematic Design.
* Processor selection and passive circuitry design.
* Printed circuit board layout design using *Altium*.
* Technical report writing and design documentation.

CORDIC Processor: Application specific processor design

*CENG 441: University of Victoria 2014*

* Use of VHSIC Hardware Description Language.
* Processor architecture design.
* Use of Xilinx hardware design suite.
* Technical report writing and design documentation.

Day-trading: eND-TO-END DAY TRADING SYSTEM

*SENG 462: University of Victoria 2015*

* Design and development of client-use web page
* Design of web server, transaction server. Interaction with third-party stock quote server
* Database design and management.
* Software scaling.
* Technical report writing and design documentation.

# Work Experience

Junior research assistant **-** University of Victoria-Victoria B.C. - September 2014 - Present

* Responsible for software implementation of experimental fully-homomorphic encryption algorithm.
* Contributed to algorithm design and conception.
* Testing management and execution on the *Westgrid*-Research Computing super computer servers.
* Designed and built a graphical user interface for an experimental run-time operating system using the *Swing* Jframe.

Co-op employee - Applied Engineering Solutions - Victoria, B.C. - January - April 2012

* Responsible for the drafting and review plans for commercial construction projects via the *AutoCAD design suite*.
* Inspected post-construction sites to create accurate 'as-built' plans for archive storage.

co-op employee - MMM Group - Vancouver, B.C. - May - August 2011

* Assisted Senior Project Engineers and Project Managers design and execute designs of power distribution, lighting and emergency systems in large-scale construction projects.
* Product data research, client-manufacturer liaison.
* On-site quality inspection.
* Designed an award calculator for *LEED*'s mercury-content, 'green'-design award using Excel.

aquatic team leader – Saanich Commonwealth Place - Victoria B.C. - January – December 2014

* Responsible for the direct supervision and management of lifeguards and swim instructors.
* Responsible for facility and equipment management.
* Incident management, quality of first-aid assessment and supervision, emergency medical services communication.
* Responsible for facility inter-departmental co-operation and communication.

Lifeguard – Saanich Commonwealth Place - Victoria B.C. - April 2006 – December 2014

* Responsible for pro-active accident prevention and supervision of patrons.
* Use of surveillance techniques.
* First-aid knowledge and application.
* Incident management, public-relations and communication skills.

# Education

Masters of Applied Science - University of Victoria - Victoria B.C. - May 2015 - Current

* Supervisor: Dr. Fayez Gebali

Bachelors in Engineering - University of Victoria - Victoria B.C. - April 2015

* Major: Computer Engineering
* Specialization: Digital and Embedded Platforms.
* Specialization: Networks Security and Privacy

standard first aid - Red Cross - Victoria B.C. - December 2015

CPR-c - Red Cross - Victoria B.C. - December 2015

# References

**Dr. Fayez Gebali, PhD, PEng**

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University of Victoria

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Phone: 250 721 6036

**Anca E. Cojocaru**, P.Eng., LEED AP

Senior Design Engineer

Associate, MMM. Group

Phone: 604 685 9381