

# Abel Romer

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CONTACT INFORMATION	Phone: contact on LinkedIn Email: contact on LinkedIn	LinkedIn: <a href="https://www.linkedin.com/in/abel-romer">https://www.linkedin.com/in/abel-romer</a> Website: <a href="https://www.abelromer.com">https://www.abelromer.com</a>
EDUCATION	<b>Quest University</b> , Squamish, BC <i>B.A.Sc., Mathematics</i> <span style="float: right;"><i>Sep. 2012 – May 2017</i></span> Received Presidential and Quest University Canada scholarships for community engagement and academic excellence. Completed coursework in abstract algebra, combinatorial game theory, graph theory, real analysis, number theory, Java programming, theoretical computer science and calculus.	
PROJECT EXPERIENCE	<b>Scheduling Website and API</b> , Vancouver, BC <span style="float: right;"><i>Nov. 2017 – Aug. 2018, Oct. 2019 – present</i></span> Designed RESTful API to process scheduling data from CSV into complete multi-week schedule. Built front end environment for user login and data entry using HTML5, CSS and JQuery. Back end data storage with PostgreSQL using SQLAlchemy ORM, request handling in Python-Flask and schedule optimization done with linear programming in PuLP. See <a href="https://www.abelromer.com/p1">https://www.abelromer.com/p1</a> .  <b>Personal Website</b> , Vancouver, BC <span style="float: right;"><i>Jun. 2017 – present</i></span> A static portfolio website built with Python-Flask and Python-Freeze. Designed using HTML5, CSS and JQuery. Deployed using Netlify and Google Search Console. Website located at: <a href="https://www.abelromer.com">https://www.abelromer.com</a> .  <b>Facial Recognition Software</b> , Vancouver, BC <span style="float: right;"><i>Jun. 2019 – Jul. 2016</i></span> Designed using Adam Geitgey's face_recognition Python library and OpenCV. Software detects motion in video stream from pixel differences and locates faces using a histogram of oriented gradients (HOG) feature descriptor. If detected faces match known face encodings, individual is named. Otherwise, individual is stored in a database and used to train the algorithm for future exposure. Code located at <a href="https://github.com/ahblay/facial_recognition">https://github.com/ahblay/facial_recognition</a> .  <b>Breadboard Computer</b> , Vancouver, BC <span style="float: right;"><i>Dec. 2019 – present</i></span> An 8-bit breadboard computer, built from logic gates and simple chips. Built from instructions by Ben Eater (see <a href="https://eater.net/8bit">https://eater.net/8bit</a> ).	
WORK EXPERIENCE	<b>Grader</b> <span style="float: right;"><i>Jan. 2018 - present</i></span> The Art of Problem Solving, Online – Reviewed and corrected student submissions for mathematical accuracy, precision, style and clarity.  <b>Landscaper</b> <span style="float: right;"><i>Sep. 2019 - present</i></span> Symbiotic Landscapes, Vancouver, BC – Maintained and constructed hardscapes and softscapes for commercial and private properties.  <b>Interpreter</b> <span style="float: right;"><i>Jun. 2017 - Aug. 2017</i></span> Britannia Mine Museum, Squamish, BC – Presented historical and scientific material in 45 minute tours of the Britannia Mine.  <b>Peer Tutor</b> <span style="float: right;"><i>Sep. 2013 - May 2016</i></span> Quest University Canada, Squamish, BC – Mentored students in calculus, differential equations, spherical trigonometry and rhetoric.	
PROGRAMMING EXPERIENCE	<i>Languages:</i> Python, Java, Javascript, HTML, XML, CSS, L <sup>A</sup> T <sub>E</sub> X, JSON <i>Data Technology:</i> PostgreSQL, SQLAlchemy, MongoDB, Pandas, SciKitLearn, Jupyter <i>OS/version control/other:</i> Mac, Linux, Git, GitHub, Microsoft Office	