# Sam MacKinnon

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### **SKILLS**

Multimedia Production (10 years): Award-winning animator. Also experienced illustration, video production, and graphic design using Adobe Creative Suite.

**Interactive Design(3 years):** Experience with and passion for learning module and online course design.

Software Engineering (2 years): Experienced with programming web apps from scratch using languages and frameworks such as JavaScript, jQuery, Typescript, Node.js, Express.js, HTML5, CSS/Less, Grunt, MySQL, MongoDB, and Git. Also familiar with Java, Haskell, Prolog, and AS3.

**Big-picture Thinking:** Excels at synthesizing information, and visualizing how individual parts of a project fit into the whole.

**Communication:** Strong ability to distill down complex information into easily digestible forms through writing and video.

# **EDUCATION**

# University of British Columbia

**BSc Integrated Sciences** 

(2013 - 2017)

- Interdisciplinary science degree focusing Computer Science, Life Sciences, and Science Communication

### Selkirk College

Contemporary Music, majoring in composition

(2006 - 2008)

- Focus on percussion, and writing music for film and television.

# MULTIMEDIA Design and Development

### Full Stack Developer

December 2016 - present

Self Employed (Vancouver, Canada)

- Created the website <u>www.palettemachine.com</u>, an interactive color palette design tool.
- The web app is hosted with Firebase, and has a fully functional backend which allows users to sign in, save, edit and load palettes.
- I used svg graphics and a drag-and-drop interface to give users the best possible experience when creating a color palette.

# Multimedia Designer and Programmer

April 2016 - April 2017

Physics, UBC (Vancouver, Canada)

- Designed interactive JavaScript web apps for UBC's Physics 100 online course.
- Found and implemented an easy to use solution for embedding interactive videos with quiz break-points into the course.

- Produced videos and animations to explain difficult physics concepts to students
- Videos and interactive content are hosted here: www.veryscience.com/physics100.html

# Learning Module Designer

May 2015 - September 2015 (work study)

Medical Genetics, UBC (Vancouver, Canada)

- Worked as a lead designer on three online modules for teaching medical students about the genetics associated with PKU, Down Syndrome, and Bipolar Disorder
- Produced interactive graphics for modules
- Filmed, edited and did interviews for "Patient Perspective" videos that were embedded into the modules.

# Videographer and Designer

September 2014 - April 2015 (work study)

Genetics Counseling, BC Children's and Women's Hospital (Vancouver, Canada)

- Offered design feedback and recommendations for an online genetics counseling decision aid.
- Produced, directed, edited videos explaining important information pertaining to getting one's genome sequenced.

# Science Game Designer

May 2014 - September 2014 (work study)

Michael Smith Labs, UBC (Vancouver, Canada)

- Designed gameplay and visual layout for genetics-themed card game funded by the Genetics Society of America (GSA).
- Game was printed and distributed to scientists at a genetics conference in 2016.

### Director/Editor

May 2014 - June 2014 (Contract)

Telus/Public Records (Vancouver, Canada)

- Awarded a \$7000 budget from Telus/Public Records to produce a music video for the Ruffled Feathers.
- Lead a 10-person professional production crew.
- Edited and delivered final video on time and on budget.
- Video aired on Telus Optics TV.

# **VOLUNTEER WORK**

Computer coding instructor - Green Timbers Elementary (Vancouver, Canada) *July 2016:* Help to design and run a coding workshop for kids (we used NetLogo). **Programming Assistant -** Telus World of Science (Vancouver, Canada) *September 2013 - May 2014:* Helped to design and facilitate science exhibits.

#### ONLINE PORTFOLIO

please visit <u>sammackinnon.ca/portfolio.html</u> to see more of my work.

References available on request