

tessaalexanian

robot whisperer & aspiring effective altruist

hello@tessa.fyi
github: alexanian

expertise

Recently

Lab Automation,
Python, Vue.js

Professionally, ever

C#, R, Perl, MATLAB,
Fortran (sigh)

Hacking & School

Molecular Biology
Arduinos & Circuitry
Mathematical Modelling

Non-technical

Event Operations,
Costuming, Illustration

etcetera

Bioweapons Convention
iGEM Delegate
2017

EA Global Volunteer
Coordinator
2017-2019

Bay Area Pun-Off
Champion
2017-2019

Brigs Tall Ship Sailor
2008-2010

experience

- since 2020 **Safety & Security Program Officer** iGEM | Remote
Helping iGEM teams to think carefully and creatively about how to manage any risks to themselves, their colleagues, their community, or the environment.
- 2016-2020 **Automation & Software Engineer** Zymergen | Emeryville, CA
Developing software to write and execute robotic protocols that are used daily by scientists in our automated organism factory. First responder (when on call) to issues with liquid handlers, robotic arms, plate readers, and other robots.
- 2014, 2013 **Bioinformatics Assistant** Princess Margaret Genomics Center | Toronto, ON
Over two internships, developed PMGC's first next-generation sequencing pipeline and examined mouse and human tissue interactions with microarray and sequence data. Benchmarked bioinformatics tools to determine best practice analysis.
- 2012 **Research Assistant** VIP Lab, University of Waterloo | Waterloo, ON
Lead developer on a research project that investigated automated annotation of low-resolution racing videos. Machine learning techniques used—optical flow segmentation and random forest classifiers—are rather out of fashion.

extracurriculars

- 2020 **Catalyst: a collaborative biosecurity summit** catalystbiosummit.com
Spearheaded a one-day conference on innovation for biological risks, supported by a grant from the Effective Altruism Long Term Future Fund.
- 2018-2019 **East Bay Biosecurity Group** eastbaybiosecurity.org
Meetup group discussing biosecurity and pandemic preparedness. One of the founding members and the recipient of a 2018 Community-Building grant from the Center For Effective Altruism.
- since 2017 **Abortion Policy API** abortionpolicyapi.com
US abortion laws available via API. Primary software developer and project manager, coordinating a remote team with members from five different non-profits.

education

- 2010–2015 **B.A.Sc. Systems Design Engineering** University of Waterloo
Graduated with distinction, on Dean's Honours List. NSERC Undergraduate Research Award (2012, 2015); SFF Award for Technical Writing (2012, 2014). Mechanically-guided touchscreen project was a finalist in the Velocity \$1K Fund and OCE Elevator Pitch competitions.