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

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.

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.ASc. 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.