

# Victoria Perizes, MSc

Full-stack developer || Biomedical engineer

vperizes@gmail.com

+1(847) 863-1322

[Portfolio](#)

[Github Profile](#)

[Itch.io](#)

## Relevant Projects

**A complete list of projects can be found in my portfolio.**

### Career Compass - *In Development*

[Github Repo](#) || [Website](#)

Career Compass is my solution to keeping a record of every position I've applied for, the corresponding company details, and the current status of my applications. This web app is available for public use as I add new features.

### Cook Your Kitchen

[Github Repo](#) || [Website](#)

As someone that loves cooking but also prioritizes shopping for seasonal foods I often find myself needing a little inspiration when it comes to combining random ingredients. *Cook your Kitchen* was my personal solution to that problem.

## Professional Experience

### Level Ex

August 2017 - February 2023

During my tenure at Level Ex, I helped grow the company from 17 employees to over 160 while increasing the adoption of professional video games in medicine. I owned expert advisory relationships, interactive narratives, technical requirements generation, and content creation pipelines for software and gaming solutions used by the top 20 medical device and pharmaceutical companies in the world. *Clients included: Auris, Brainlab, GE, J&J, Medtronic, Merck, NASA (TRISH), Novartis, SpaceX, and more.*

### Consultant, Biomedical Solutions - Space Medicine (Nov 2022 - Feb 2023)

- Exclusively oversaw space medicine projects with NASA and SpaceX.
- Continued to function as Principal Investigator while onboarding new team members. Coached new team members on how to make strategic decisions and negotiate with clients.
- Developed documentation for all legacy space medicine projects. This was used as onboarding materials for new hires.

### Lead Biomedical Solutions Specialist (May 2022 - Nov 2022)

- Principal Investigator; worked with the Translational Research Institute for Space Health (TRISH). Lead author of grant. Award amount: \$1.1 mil.

## Skills

### Programming Languages

JavaScript, HTML, CSS, C#, Python

### Frameworks & Libraries

React, React Query, Node.js, Express, Axios, Bootstrap, JQuery, REST API Architecture

### Tools & Platforms

Git, GitHub, Postman, Render.com, Figma, Miro, Agile Dev, Jira, Perforce

### Databases

MongoDB + Mongoose

### Game Engines

Unity 3D

## Certifications

### The Complete 2023 Web Development Bootcamp (Nov 2023)

Issued by Udemy, Instructor: Dr. Angela Yu

### Shader Graph for Beginners (April 2023)

Issued by Udemy, Instructor: Penny De Byl

### Unity Essentials Pathway (April 2022)

Issued by Unity Technologies

## Education

### University of Illinois at Chicago (UIC)

MSc, Biomedical Engineering -

Responsible for:

- Project scoping, product roadmap, and medical design of an ultrasound training game for astronauts participating in the Artemis missions.
- Defining and communicating product requirements to dev team.
- Collaborating with graphics engineering team to determine best approach for rendering computationally generated ultrasound images to support game play.
- Contributed to requirements definition for data structure that could support volumetric data structures consisting of mechanical tissue data.
- Co-Principal Investigator; worked with SpaceX, KBR and TRISH, creating a just-in-time instructional ultrasound guide [supporting SpaceX's Polaris Dawn mission](#).
- Regularly met with clients to review product features and design solutions. Responsible for managing client input and expectations.
  - Regularly presented progress, blockers, and successes to internal and external stakeholders, including executives.
  - Defined sprint goals and milestones with dev team.
- Delivered cloud based, SaaS solutions to Brainlab to improve product visibility across their spine surgery and radiation oncology markets.

### Senior Biomedical Solutions Specialist (Oct 2019 - May 2022)

- Co-Principal Investigator in our first project funded by TRISH. Co-authored grant: Award amount: \$1.5 mil. Led the biomedical research effort and managed a team of 4 biomedical solutions specialists to support the development of the [Virtual Human Simulator \(VHS\) platform](#).
  - Led team through the entire product lifecycle.
  - Collaborated with leadership to define product vision and roadmap.
  - Worked with graphics engineering team to develop a real-time virtual ultrasound tech stack (1st of its kind).
  - Coordinated and conducted user interviews and playtests.

### Biomedical Solutions Specialist (Aug 2017 - Oct 2019)

- Developed algorithms characterizing specific behaviors of biologic systems. Algorithms were foundational to game design.
  - Modeled the relationship between lung mechanics and gas transport.
  - Modeled the reversal of neuromuscular blockades used in anesthesiology. (*See portfolio for math model*).
  - Worked with software engineers to implement algorithms and ensure outputs were medically credible.
- Led and was responsible for biomedical research and strategic oversight for [Airway Ex](#) and [Pulm Ex](#).
- Conducted user research and playtests; responsible for gaining insights into user needs and market gaps for Airway Ex, Pulm Ex, and [Gastro Ex](#).

### Shirley Ryan Ability Lab, Chicago, IL — Graduate Researcher

August 2016 - June 2017

- Led the design of the second generation of the ExoNET (previously MARIONET) - a passive, torque assisting exoskeleton - to aid in the rehabilitative process for recovering stroke patients.

Concentrations in Biomechanics and Neural engineering

BSc, Kinesiology - Concentration in Biomechanics

### Awards

#### Moxie Award Winner (2022)

Presented by BuiltIn for outstanding contributions to the tech industry

### Interests

Olympic weightlifting, football (soccer), hiking & bouldering, sci-fi novels, cooking, music

- Developed mathematical models and algorithms to empirically optimize ExoNET parameters with the goal of achieving any desired torque profile for single and two-joint actuation using the MATLAB Optimization toolbox.

*Publication:* [A Theoretical Framework for a Network of Elastic Elements Generating Arbitrary Torque Fields](#), *BioRob. IEEE*, 2020 pp. 286-291.