

Victoria Perizes, MSc

Software developer || Biomedical engineer

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[Portfolio](#)

[Github Profile](#)

[Itch.io](#)

Relevant Projects

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

[Cook Your Kitchen ↗](#)

Recipe finder web app enabled by Edamam's Recipe Search API. Have random ingredients in your kitchen that you want to cook? Search for those ingredients and get recipes.

[Hosted on render.](#)

Professional Experience

Level Ex

August 2017 - February 2023

At Level Ex I deeply collaborated with our team of software engineers, game designers, artists, UI/UX designers and user researchers (UR) to develop engaging virtual experiences. *Clients included: Auris, Brainlab, GE, J&J, Medtronic, Merck, NASA (TRISH), Novartis, and SpaceX.*

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

- Exclusively oversaw space medicine projects with NASA and SpaceX.
- Continued to function as Principal Investigator (PI) while onboarding replacement.new
- Developed documentation for all legacy projects that current space medicine projects were built off of. This was used for all new hires brought onto space medicine projects.
- Provided strategic input to team. Coached new hire on how to make strategic decisions and negotiate with clients.

Lead Biomedical Solutions Specialist (May 2022 - Nov 2022)

- PI in our work with the Translational Research Institute for Space Health (TRISH). Lead author of grant. Award amount: \$1.1 mil. 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/features to dev team.

Skills

Programming Languages

JavaScript, HTML, CSS, C#,
Python, OpenGL

Frameworks & Libraries

React, Node.js, Express,
Bootstrap, JQuery, Passport.js

Tools & Platforms

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

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

- Co-PI working with SpaceX, KBR and TRISH, creating a just in time guide instructing commercial crew on ultrasound image acquisition - [supporting SpaceX's Polaris Dawn mission](#).
- Responsible for product vision and features. Led team through entire product lifecycle.
- 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.
 - Ensured medical credibility throughout product lifecycle.
- Delivered cloud based, SaaS solutions to Brainlab (parent company) to improve product visibility across their spine surgery and radiation oncology markets.
 - Designed conference, sales enablement, and training experiences highlighting market differentiators and competitive advantage.
 - Collaborated with UR/UX teams to better understand end users and define product needs based on user personas.

Senior Biomedical Solutions Specialist (Oct 2019 - May 2022)

- Co-PI 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 entire product lifecycle.
 - Collaborated with leadership to define product vision and roadmap.
 - Coordinated and conducted user interviews and playtests.
 - Designed a data driven visualizer that visualized aggregated space medicine data based on peer-reviewed publications.
- Regularly collaborated with clinical KOLs and medical experts to ensure medical credibility of industry sponsored games and experiences.

Biomedical Solutions Specialist (Aug 2017 - Oct 2019)

- Developed algorithms to characterize specific behaviors of biologic systems. These algorithms were used as the basis for game mechanics in industry sponsored content.
 - Modeled the relationship between lung mechanics and gas transport.
 - Modeled the reversal of neuromuscular blockades used in anesthesiology.
 - Worked with software engineers to implement algorithms and ensure outputs were medically credible.
- Established processes and pipelines to increase interdisciplinary team efficacy particularly around playtesting and user feedback.
- Optimized processes and pipelines to decrease cross-disciplinary friction by aligning team goals with sprint cadence.
- Led and was responsible for biomedical research, medical content authoring, and strategic oversight for [Airway Ex](#) and [Pulm Ex](#) - the first professional video games for anesthesiologists and pulmonologist, respectively.

Education

University of Illinois at Chicago (UIC)

MSc, Biomedical Engineering - 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

- Reviewed peer reviewed research and publications to translate medical best practices to our games.
- 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

- Lead 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.
- Developed mathematical models and algorithms to empirically optimize the adjustable parameters of the ExoNET 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.*