DESIGN
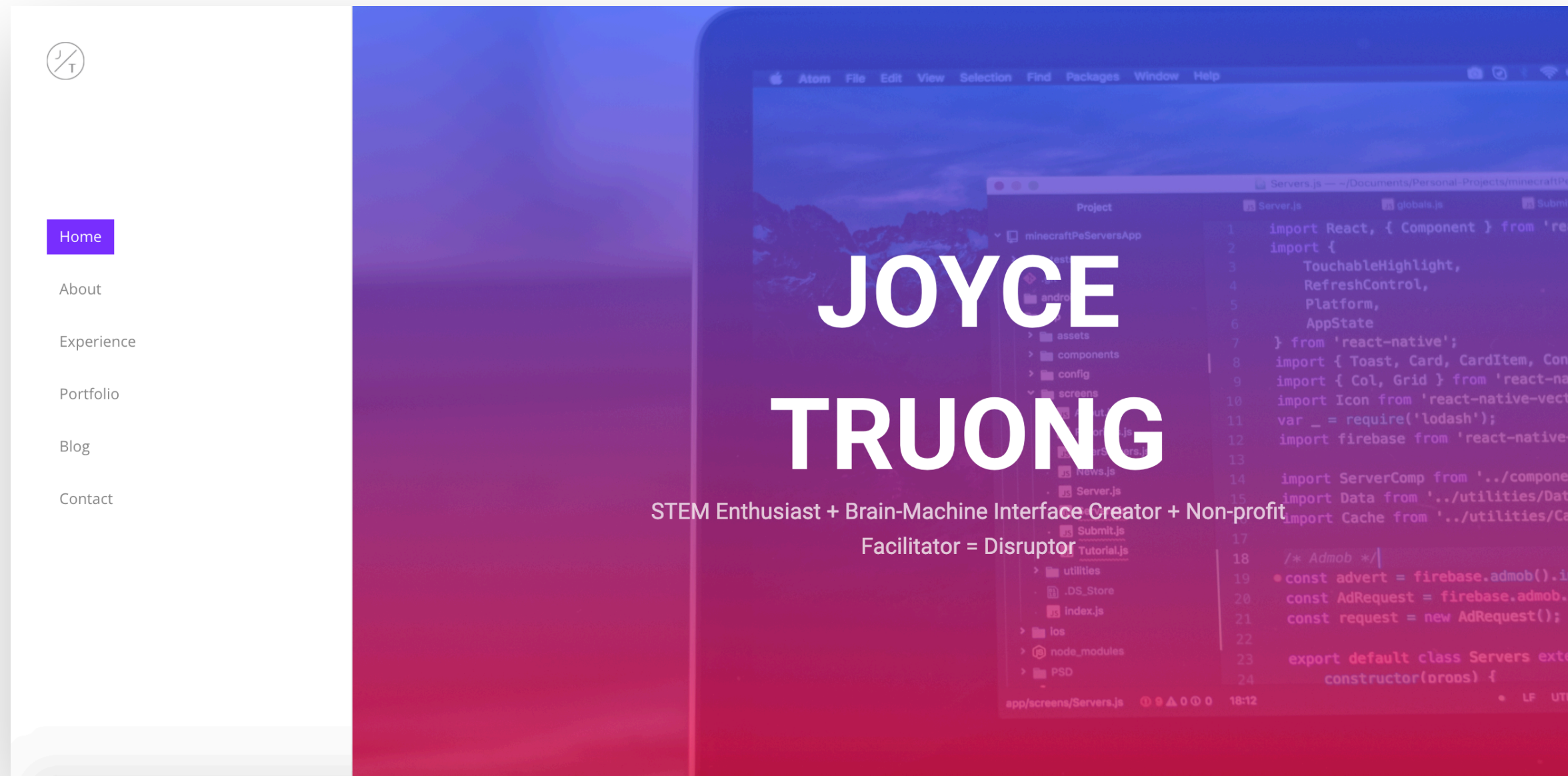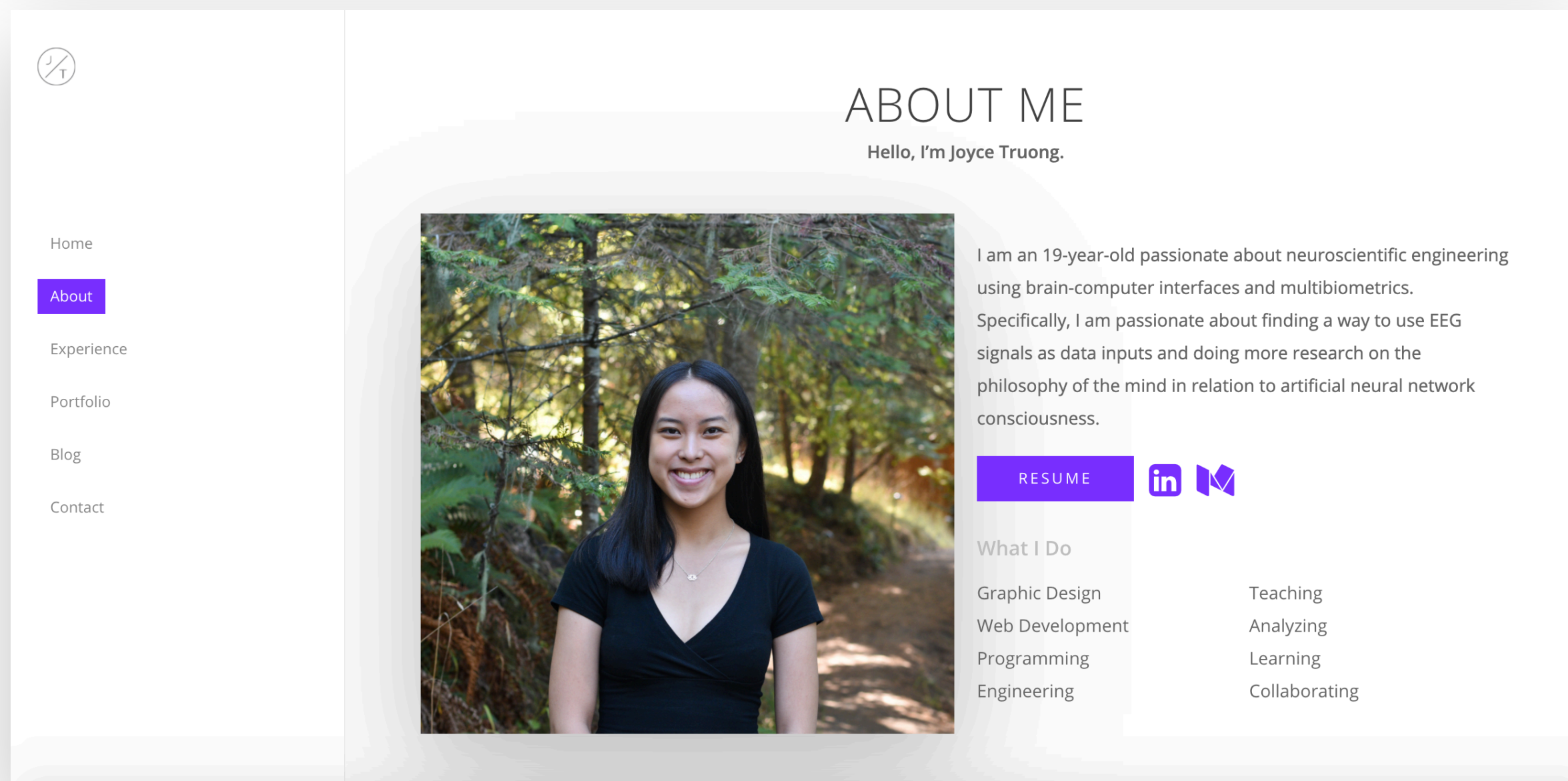
PORTFOLIO

JOYCE TRUONG

joycetruong.com

Tools: Wordpress & PHP

Personal website resume created with Wordpress & PHP.

Resumes

Tools: Adobe Illustrator & Photoshop

Personal resumes created from scratch using Adobe Creative Cloud.

Joyce Truong
Brain-Machine Interface Creator | Non-Profit Facilitator | STEM Enthusiast

joyce.j.truong@gmail.com
+1 (412) 965-9138
joycetruong.com
github.com/joycetruong
linkedin.com/in/joyce-truong
medium.com/@joyce.j.truong

Who am I? I am a freshman pursuing a degree in Artificial Intelligence and minor in Design at Carnegie Mellon University. My passions include brain-machine and human-computer interface engineering, neurophilosophy, STEM advocacy, and user experience design. I am also an artificial intelligence developer, writer, and creator.

Experience

Lab Researcher
CMU HCI Institute
Pittsburgh, PA
Nov 2020 - Present

Currently researching 3D food printing with syringe-based extrusions in suspension baths using kitchen supplies and everyday ingredients. Collaborating with a graduate student and 3 experts from the Morphing Matter Lab at Carnegie Mellon University to find ways to integrate nutritional content into different 3D food printing techniques and substances.

Lab Assistant
CMU Robotics Institute
Pittsburgh, PA
Oct 2020 - Present

Currently coding a social navigation benchmarking tool for robots as part of the Human and Robot Partners Lab at Carnegie Mellon University. Using Python libraries such as NumPy and SciPy to code the asynchronous robot navigation mode in which robots learn how to navigate through real-world obstacles in real time.

Managing Editor & Head of Technology
First Person Magazine
Victoria, BC
Jan 2019 - Mar 2020

Pioneered the first innovation, design, and technology team of 5 creatives. Solely responsible for the development, design, and publication of all 9 issues of the magazine's website and print editions by using WordPress, PHP, Adobe InDesign, and Adobe Illustrator. Mentored the incoming technology team on using WordPress and PHP.

Co-Leader
Social Innovation Club
Victoria, BC
Sep 2018 - Mar 2020

Worked with 12 social entrepreneurs to create an innovation project grocery delivery, which saved each person 3 hours weekly while red fuel-based environmental footprint. Created and managed the org HTML/CSS/JavaScript. Raised $1000 for charities to fund future co

Leader
Computer Science Club
Victoria, BC
Sep 2018 - Mar 2020

Taught 14 inexperienced students from 10 different countries weekly HTML/CSS/JavaScript, and Arduino seminars and projects. Led the auto-sorting Python program that organized kitchen work schedule on maximizing diversity, which saved administrative staff 72 hours of

Innovator
The Knowledge Society
Toronto, ON
Oct 2017 - Jun 2019

Selected as one of the top 15% of applicants for the first-ever progr high entrepreneurial potential about exponential technologies, net mindsets. Part of the top 3% within the program selected to demo c world-scale tech conferences, such as TribalScale's TakeOver Innov Montréal, about multibiometrics and visual-evoked potential techn

Education

Carnegie Mellon University   Pittsburgh, PA   Aug 2020 – Present
B.S. in Computer Science | GPA: 3.77, Dean's List with High Honors
5% admission acceptance rate, Top computer science school in the world

Lester B. Pearson United World College   Victoria, BC   Aug 2018 – Jun 2020
International Baccalaureate Program
1 of 100 selected internationally, Higher Level Math, Philosophy, Chemistry, and Physics
Thesis: Simulation of Artificial Consciousness Using Artificial Neural Networks (Philosophy)

Awards

2x DECA Business Case Competition International Competitor (2018: Top 10 in the world & 2nd provincially for Operations Research, 2017: 8th provincially for Marketing), **University of Waterloo Math & Computing** (2012-2018: Honour Roll Top 5% & Top 25% recognition for various mathematical and computing contests), **Academic Achievement Awards** (School of Computer Science Fall 2020 Dean's List with High Honors, 2018 AP Scholar With Honor, Highest Overall Achievement Award; English, Mathematics, Computer Technology, Physical Education, and Geography Subject Awards; Honour Roll).

JOYCE TRUONG

Non-profit Facilitator |
Biometrics Creator |
STEM Enthusiast |

WHO AM I: I am an first year student at Pearson College UWC, passionate about interdisciplinary bio-medical science, cognitive and neuroscientific engineering, and anything tech. I have years of experience in software, hardware, team management, and design.

joyce.j.truong@gmail.com
joycetruong.com
linkedin.com/in/joyce-truong/
(416) 629-9379

EXPERIENCE

2018
Royal Bank of Canada
Innovation Analyst
Collaborative work environment on innovation projects to initiate change in the organization.

2016-2019
DECA
President & Marketing Director
Trained more than 100 members who qualified provincially and designed promotional

2017-2018
The Knowledge Society
Innovator
Went into deep focus into AI, VR and AR, genomics, blockchain, and quantum computing. TKS is known as one of the best programs for learning globally.

2017-2018
L.I.G.H.T. - One Child One World
Director & Designer
Organized and facilitated 6 free camps and 2 tutoring program for underprivileged children.

2017-2018
Power Unit Youth Organization
Marketing Team Lead
Lead a team to create a career conference for high school students all over Toronto.

2017-2018
FUSE Society
Academic Coordinator
Created 5+ business lessons including technological trends and AI, distribution, and promotional strategies. Also wrote 3+ case studies for competitions.

EDUCATION

Lester B. Pearson College United World Colleges   2018-present
Student in the International Baccalaureate Program
1 of 100 students selected internationally

Richmond Hill High School   2015-2018
Student in the Gifted/Enriched Program, 2015-2017
Student in the Advanced Placement Program, 2017-2018

AWARD

2x DECA International Competitor   2017/2018
8th at Provincials for Marketing Orals, 2017
2nd at Provincials for Operations Research Writtens, 2018

Academic Achievement Awards   2016/2017
Grade 10 Highest Overall Achievement Award; English, Mathematics, Computer Technology, Physical Education, and Geography Subject Awards; Honour Roll Award.

Waterloo Math & Computing   2012-2018
Honour Roll and Top 25% recognition for various mathematical and computing University of Waterloo contests.

PROFESSIONAL SKILLS

OVERVIEW
HARDWARE
APP DESIGN
GRAPHIC DESIGN
PITCHING
SOFTWARE PROGRAMMING
MICROSOFT OFFICE

DESIGNING
Typography, InDesign, Photoshop, HTML, WP, Illustrator

PROGRAMMING
HTML, JavaScript, Java, MATLABs, Python, Arduino

Wedding Artwork

Tools: iPad Pro & Procreate

Color-block artwork created as a wedding gift for my older brother on the iPad Pro using the Procreate app. Done by isolating large color sections on a photograph.
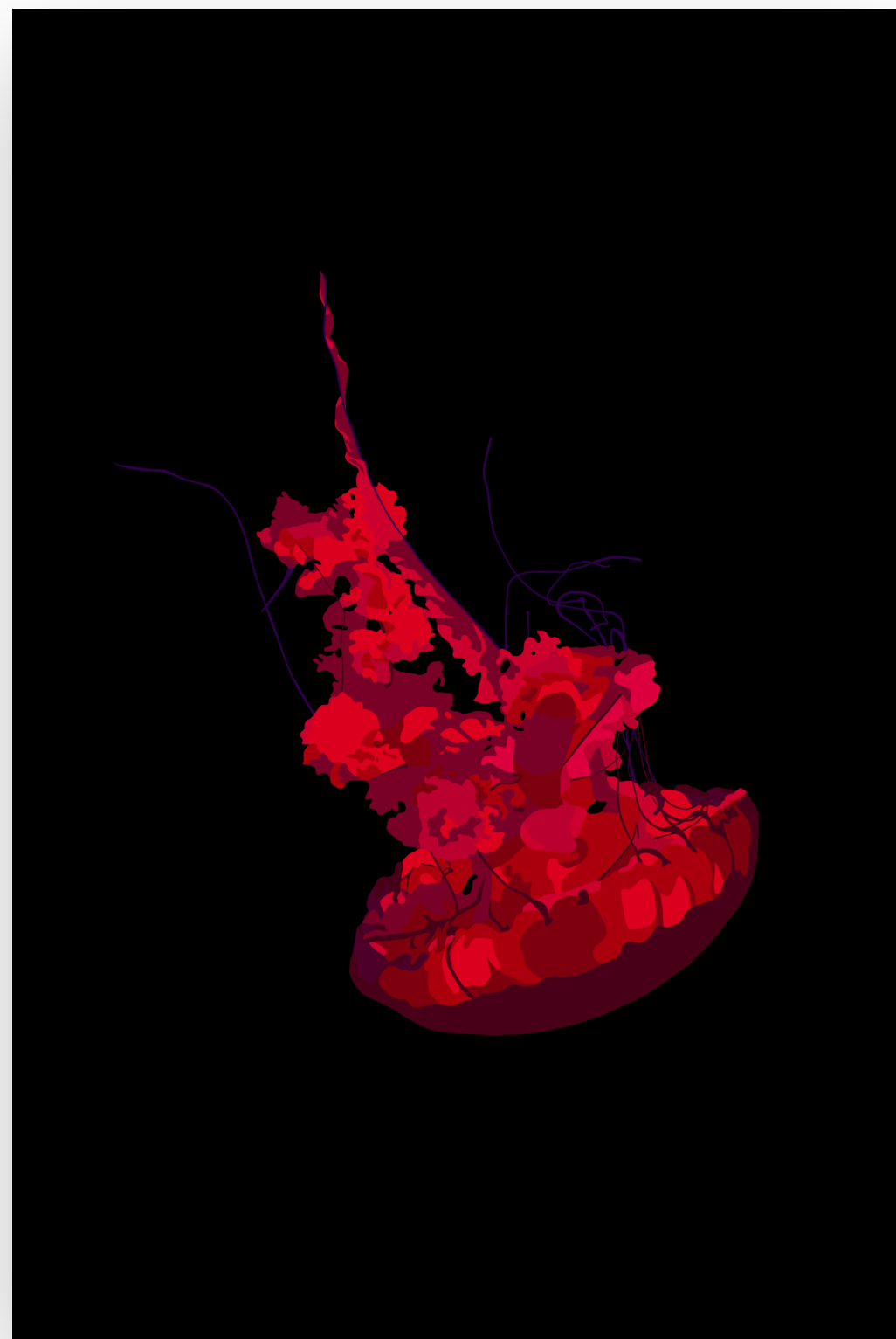
Memories Triptych
Tools: iPad Pro & Procreate

A trio of memories drawn on the iPad Pro using the Procreate app. Done as a gift to a friend by drawing photos without blending colors together.

Portrait of Sierra

Tools: iPad Pro & Procreate

A portrait of a friend holding a miniature version of her cat, Tofu. Done as a fun side project and as practice with the Procreate app and drawing on an iPad Pro.

Colored Sketches

Tools: Prismacolor Color Pencils

Colored sketches done using Prismacolors and reference photographs. A blending pencil was also used for both.

Perfectionism:

A Diagnosis

I'm that kind of person who sits and thinks for hours at a time. My head tilts towards the side and my eyes stare off into the distance, glazed and lifeless. It's as if I'm begging the thin air around me to conjure a flawless idea, pleading for it to deliver an immense epiphany and colour my world. Of course, those dim-witted air particles fail me every time. So I'm left paralyzed, furiously producing thoughts as quickly as I shoot them down for their imperfections.

Like many of you, I'm a slave to my own perfectionism.

The eighth deadly sin, this behaviour is at the foundation of the human condition. Just like roots in the ground, the inability to accept our flaws is what ultimately plants us in place (note: the pun above was meant to unnerve perfectionists). It sculpts our fear of failure and reminds us that our dreams are illusive pots of gold at the end of alluring rainbows.

To begin to cure this virulent disease, we must take a look at ourselves in the mirror. Neglecting our biases for that awfully familiar face, we must then spend an honest minute prying inside and finding the cause of this self-destructive behaviour.

For some, it's insecurity and lack of self-esteem that devours their minds. They are the ones who forget the value of existence and that to be is, in it of itself, extraordinary. Drilled into their subconscious is the misconception that only winners are valuable and only the best can be beautiful. So when their doll-veneer gives way to their imperfect humanness, they lose all sense of worth. Perfectionism then becomes their drug of remedy, allowing brief highs of success but ultimately fruiting unparalleled dissatisfaction.

For this classification of perfectionism, the cure is a process taking years or perhaps decades. Just like self-hatred, self-love can be instilled. With the right type of friends, an insecure perfectionist will realize that they are worthy, even with their plethora of less than pretty dents and scratches.

Then there's the perfectionist who places too much importance on rather trivial tasks. A mini homework assignment turns into a three hundred page thesis paper, or taking an Instagram-worthy selfie becomes a nearly impossible quest. These individuals suffer because of their inability to stifle their hunger for improvement. The part of the brain that's supposed to say "good enough" has been switched off and as a result, the heavy shadow of perfectionism looms over their every thought and action.

When dealing with any obsessive behaviour, the only way to control it is to set strict boundaries. Time limits can cap the amount of effort spent on simple tasks. To give yourself an hour to finish a drawing forces you to accept that you are not a camera. With time, you will learn to draw imperfectly, revelling at the beauty of disproportionate figures and uneven pencil strokes.

At the end of the day, we are a balancing act. For those of you that find perfectionism on the heftier side of your elaborate see-saw, this is to remind you that you are not alone. Many of us find ourselves chasing unicorns. Though we know that this pursuit will drag us through thistles, we are still foolishly scouring the world for our illusive goddess.

Perfection, we have not found you for you have evaded us time after time. But starting now, we seek something better—our true selves.

// LLOYD FAN
DESIGNER // JOYCE TRUONG

Magazine Article

Tools: Adobe Photoshop & InDesign

Magazine article designed for the school newspaper, Spyglass, using Adobe Creative Cloud.

Magazine Article 2

Another magazine article designed for the school newspaper.

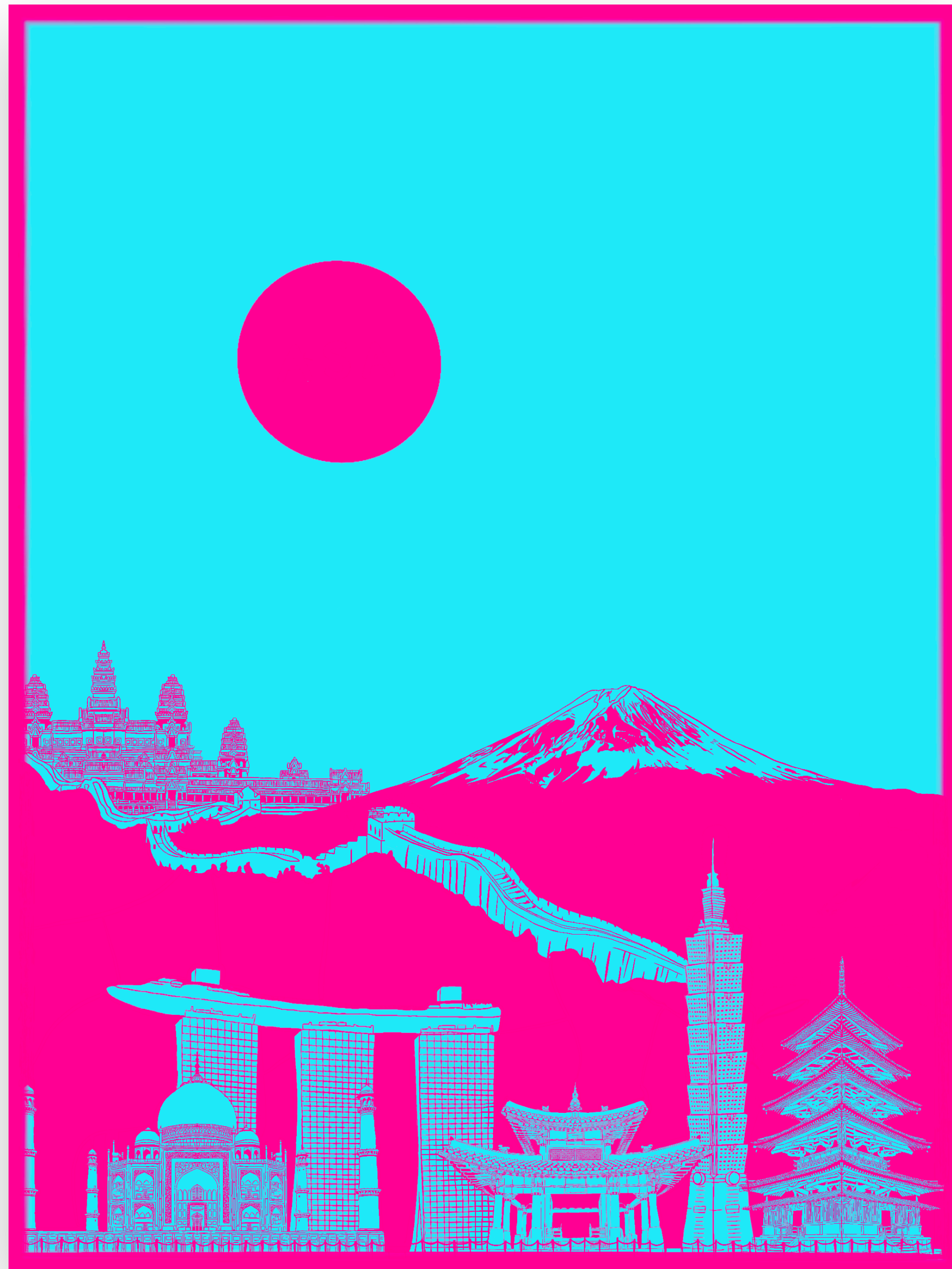// HOORIYA MASOOD
PHOTOGRAPHY // REINA DINGMAN
DESIGNER // JOYCE TRUONG

THE STARVING ARTIST

Art holds the secrets and innermost desires of many. Its ability to touch hearts is limitless — whether it be music, visuals, drama, or prose, we rely on art in order to stay human. And yet, despite its infinite importance in our lives, the appreciation we hold for art is often superficial.

This hypocritical appreciation of the arts is ingrained in us from an early age. Being talented at the arts is a quality to be admired, however, when a student cannot excel in the subject, they are told that they lack the affinity for it. Their little success is deemed natural and understandable. Completely objectively, this can be an acceptable approach when children cannot do something. Yet, double standards appear when you compare this situation to a child lacking in a more academic field. For instance, when a child is bad at math or science, they're told they need to try harder, and that they have to work around their struggles. Students are forced to take these subjects for years, whether or not they intend to use it in their futures, whereas the arts are rarely mandated in a similar manner. The reasoning for the difference in treatment between the two is obvious: one is clearly valued more than the other.

In terms of value, many argue that you need a basic understanding of math and science in order to navigate the world as an adult. While I'm unsure of why you would need to understand the function of a mitochondria if you were, perhaps, an architect, there are always advantages and skills to be learnt through such knowledge. And as terrifying as parabolas may seem, one may want to understand how to calculate compound interest to help with future finances. Yet while we are obligated to acquire all this knowledge, both the useless and practical, we are missing the countless benefits of art. We lack the means to express ourselves, destress, or understand others in a manner that is both safe and healthy.

This ideology continues influencing us as we grow. When one dreams of crafting a future from art, they're often shot down. It is a path set for ruin, some claim. A child telling their parents that they are going to major in the arts is seen as the equivalent of a death sentence to any potentially successful future. Moreover, if the artist in question possesses other, more "redeemable" talents, they are warned not to waste their potential. After all, why would an individual who excels in academic subjects, such as math, choose such a futile path in life? The starving artist stereotype persists and only spreads.

As this stereotype prevails, and we continue to undermine the arts as careers, hopeful artists are dissuaded from a profession of their liking, believing they will suffer economic consequences. This further promotes the idea that a stable income and a career in the arts is mutually exclusive (when, in fact, they aren't). Many careers face similar struggles: countless aspiring doctors remain at a loss of what to do with their specialized biology degrees after failing in the face of competitive and rigorous medical school admissions. The overflux of teachers leaves many graduates navigating a tight labour market, struggling to attain the job they desire. Nevertheless, these careers are still viewed as more stable. As a result, we see many passionate, talented artists choosing "safer" career plans at the cost of doing what they love.

Amidst this judgment, we are relentless in using said arts as hobbies, for our own personal convenience: to conquer grief and portray happiness whenever we choose. We love admiring art, we love listening to music, we love watching plays — but aside from top notch celebrities, we constantly undermine actual workers in these careers.

If one heavily relies on music, they must support the artists, and the art itself with their thoughts and actions. If they enjoy the magic of theatre, they should support drama in the same manner. Music, drama, dance, and language should hold the same weight and respect as traditionally academic careers. Besides, a community solely brimming with academia-oriented individuals would lack diversity and vibrancy. Moreover, it is due time to appreciate the artists who bring out the best and worst in us, and most of all, keep us human.

Procreate ASA Artwork

Tools: iPad Pro & Procreate

A digital drawing created to capture a variety of different, famous buildings from all around Asia. Illustrated as a representation of the South, Southeast, and East Asian communities all part of the Asian Student Association at CMU.
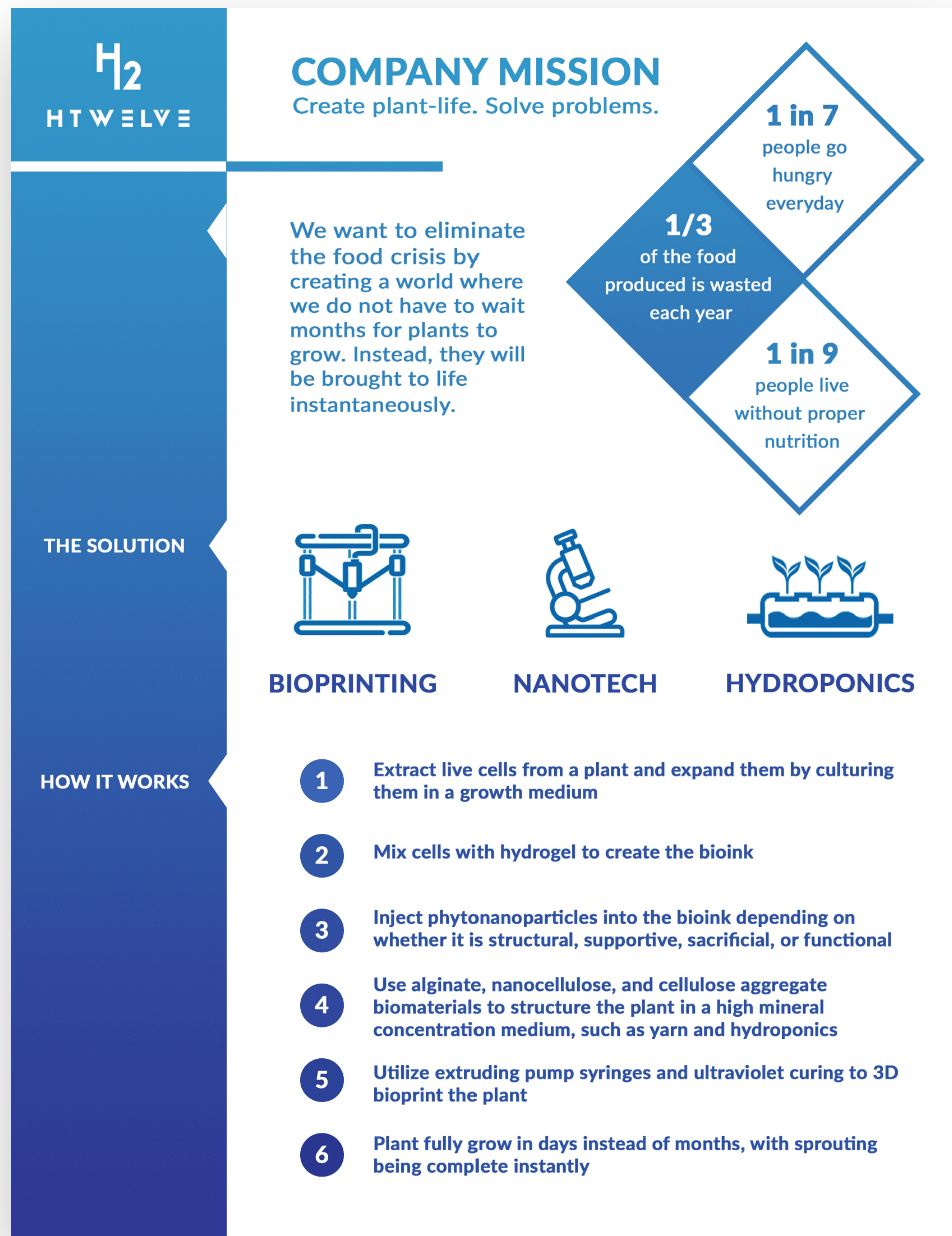
joyce
trương

Calligraphy
Tools: iPad Pro & Procreate

Some calligraphy done for fun on the iPad. I also enjoy doing calligraphy using various markers and fountain pens!

Welcome Back ASA

MERRY CHRISTMAS PHI

Merry Christmas Pietro

H-Twelve One-Pager

Tools: Adobe Illustrator & InDesign

A one-pager designed from scratch using Adobe Creative Cloud to highlight a moonshot idea that a friend and I had, which entailed 3D bioprinting plants.

H₂
H T W E L V E

COMPANY MISSION
Create plant-life. Solve problems.

We want to eliminate the food crisis by creating a world where we do not have to wait months for plants to grow. Instead, they will be brought to life instantaneously.

1 in 7 people go hungry everyday

1/3 of the food produced is wasted each year

1 in 9 people live without proper nutrition

THE SOLUTION

BIOPRINTING   NANOTECH   HYDROPONICS

HOW IT WORKS

1. Extract live cells from a plant and expand them by culturing them in a growth medium

2. Mix cells with hydrogel to create the bioink

3. Inject phytonanoparticles into the bioink depending on whether it is structural, supportive, sacrificial, or functional

4. Use alginate, nanocellulose, and cellulose aggregate biomaterials to structure the plant in a high mineral concentration medium, such as yarn and hydroponics

5. Utilize extruding pump syringes and ultraviolet curing to 3D bioprint the plant

6. Plant fully grow in days instead of months, with sprouting being complete instantly

Cute Questions
Tools: Adobe Illustrator & InDesign

Cute graphical questions that I have created as icebreakers. Done for a recitation that I teach as a teaching assistant.
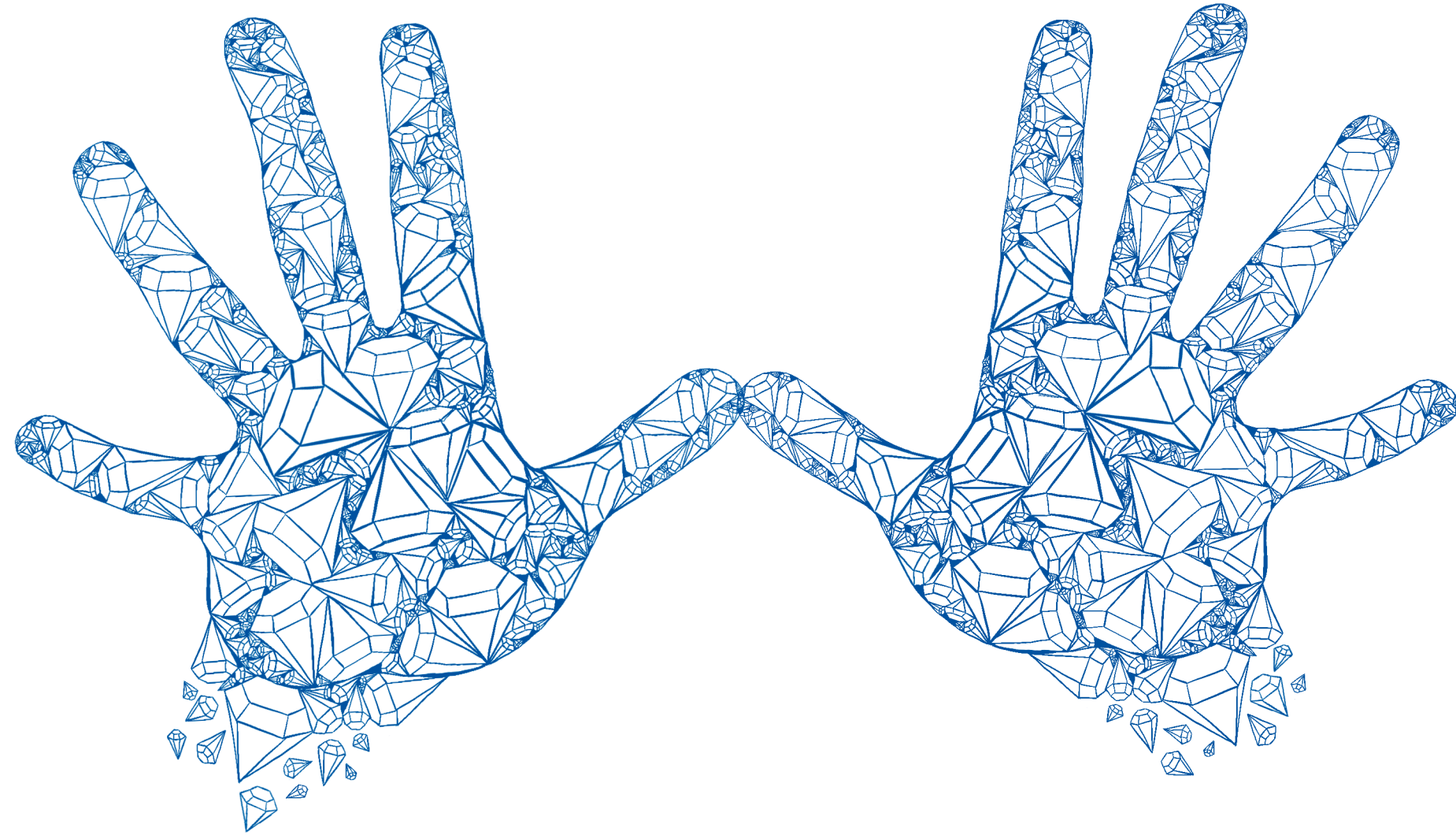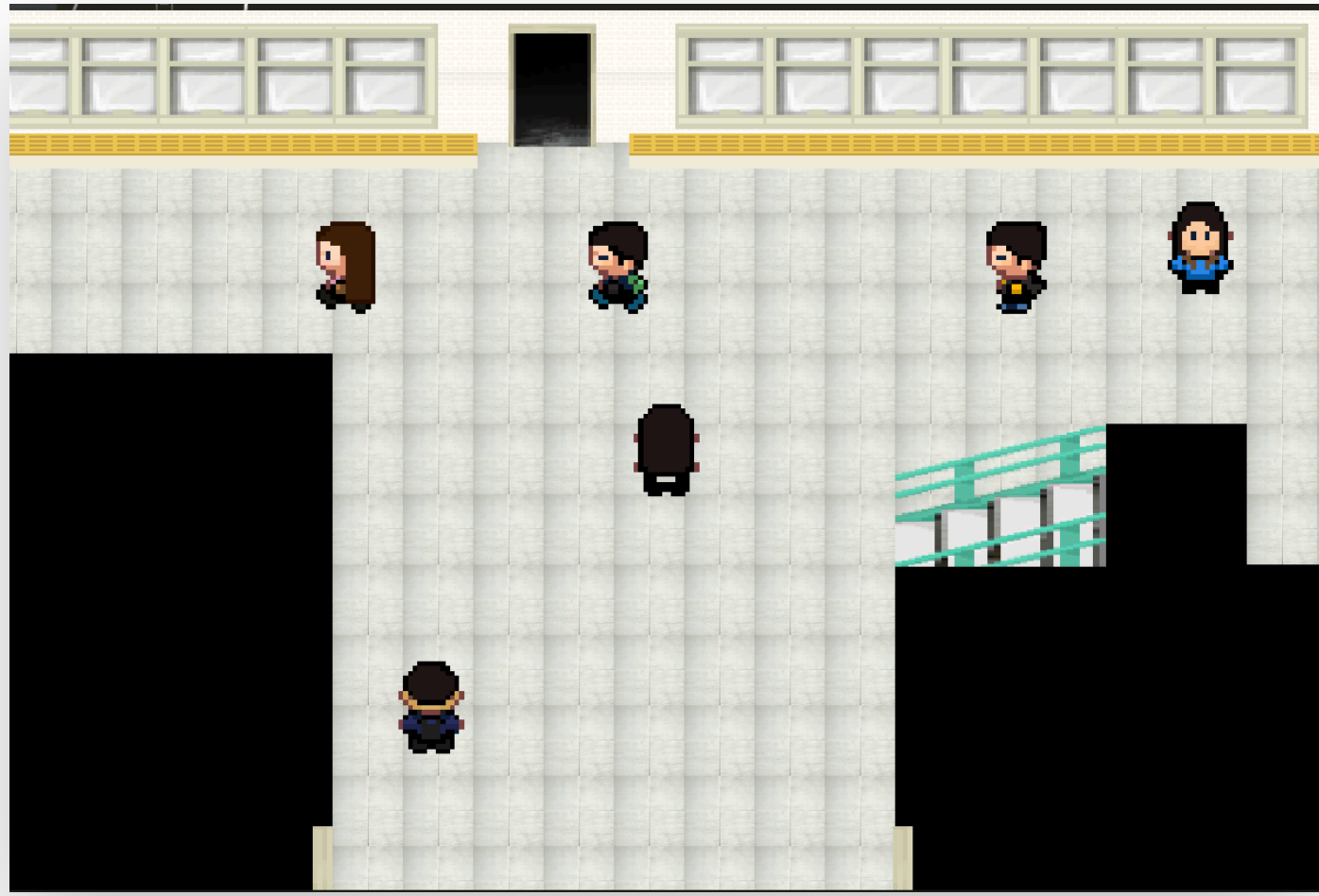
Geometric Art

Tools: iPad Pro, Procreate, & Adobe Illustrator

Geometric artwork done as drawings and as vector art. The hands were illustrated as a Procreate drawing and the logo was created on Adobe Illustrator.
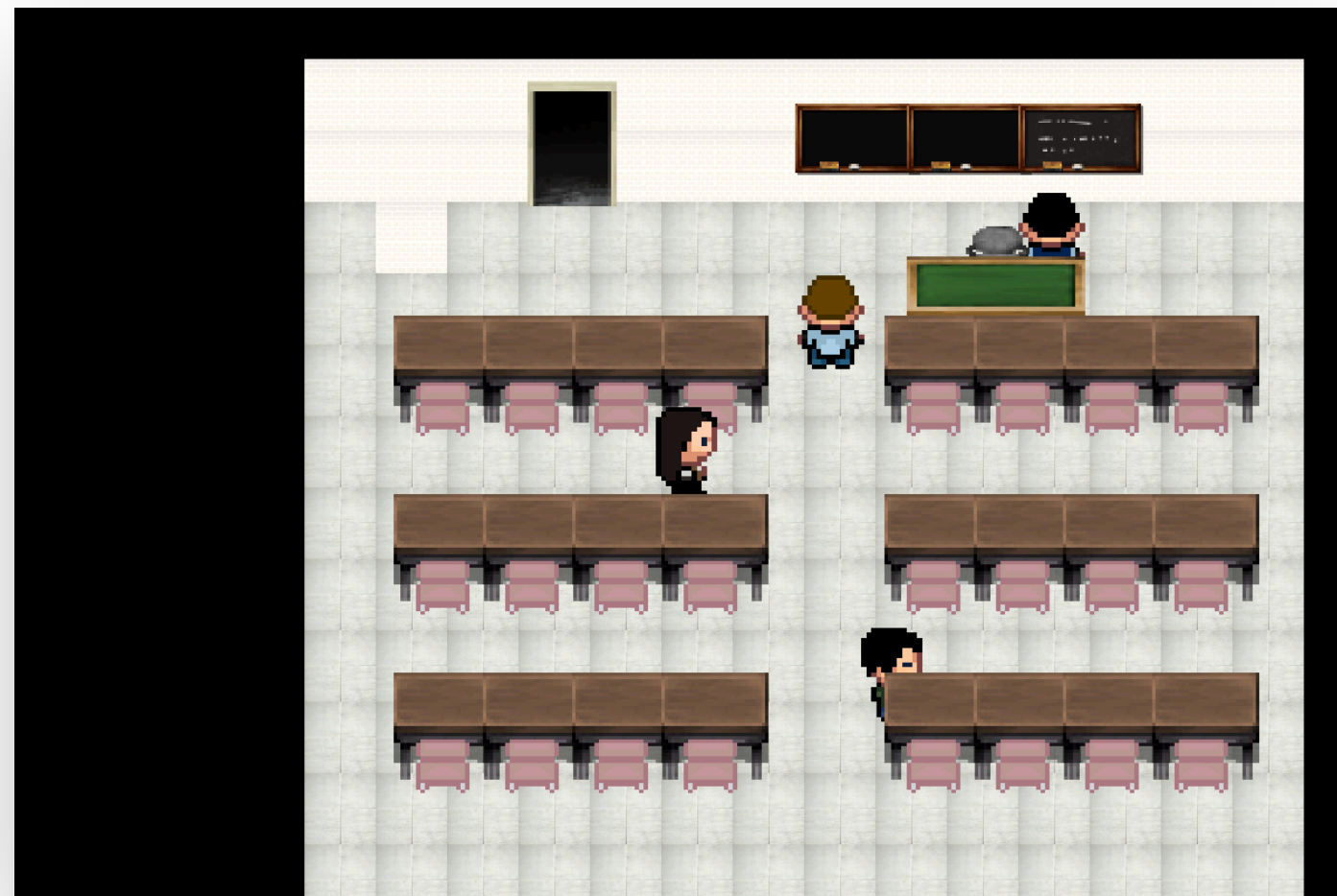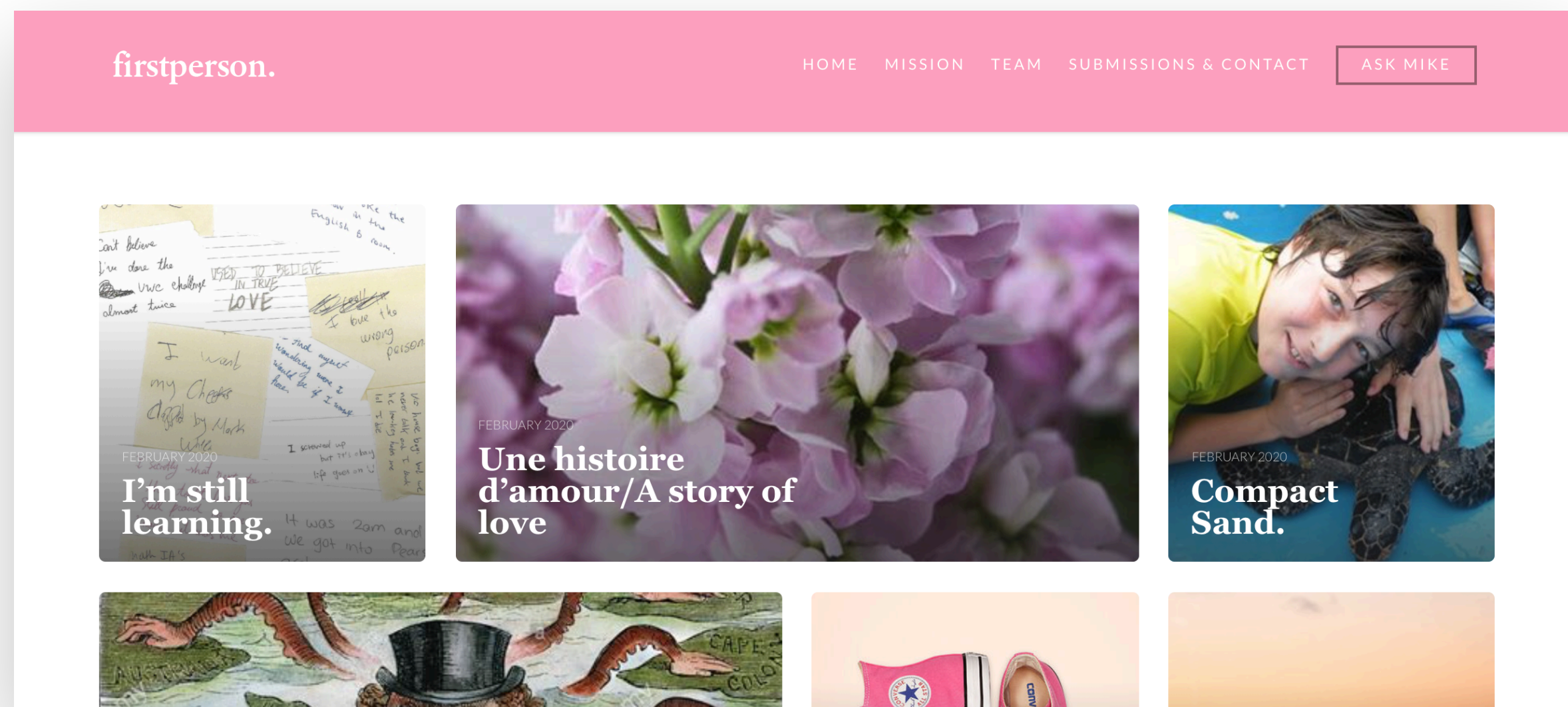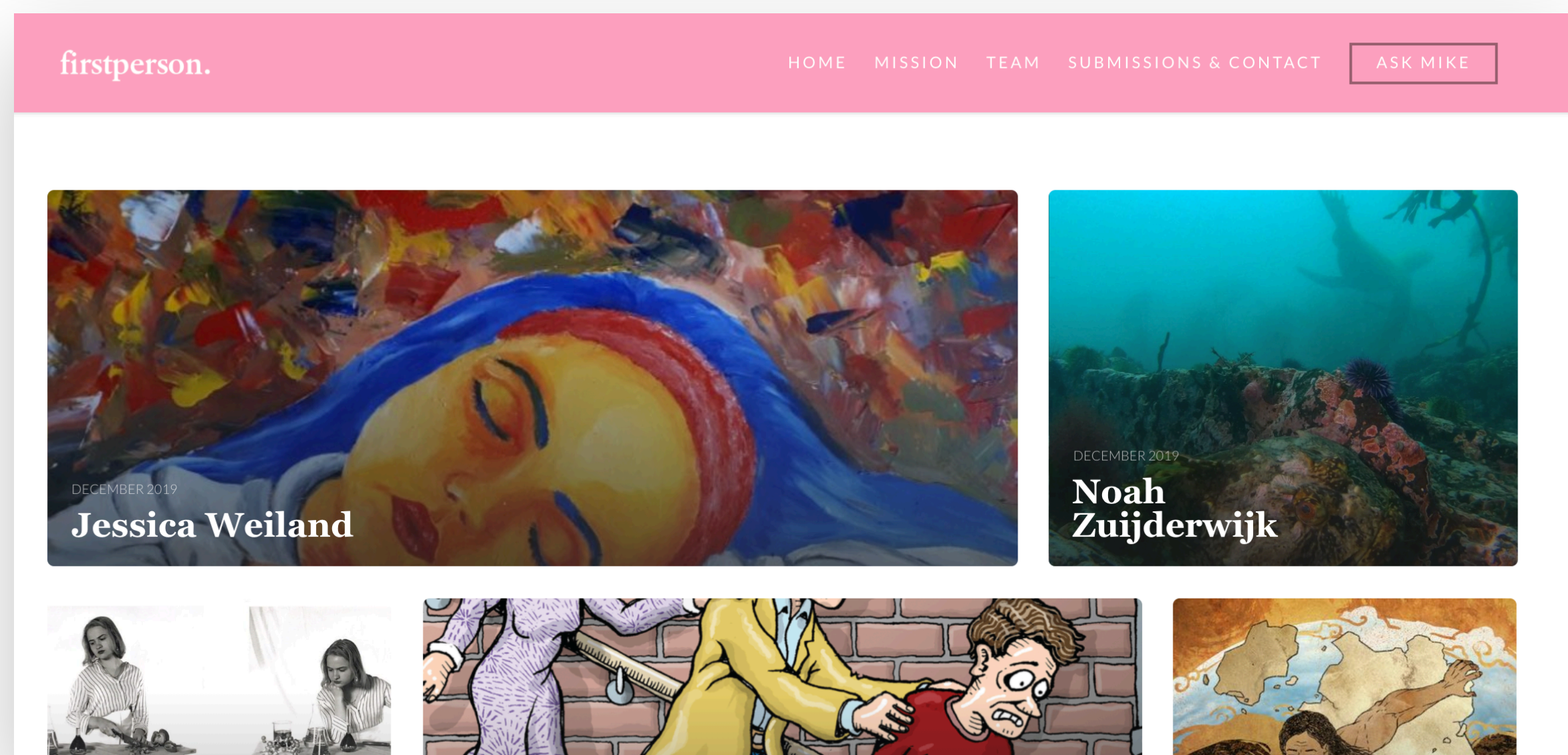
Teacher's Pet Graphics

Tools: iPad Pro & Procreate

Pixel graphics created for a final project in which I worked in a group of four to recreate a Pokémon version of my school.

firstperson-magazine.com

Tools: Wordpress & PHP

Website created for the school's magazine with the purpose of highlighting the first-person stories of students from all around the world.