

# Kevin Yeung

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## PROFILE

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Creative and disciplined computer science graduate seeking tech-based opportunities in the United States. Quick to learn and particularly creative in problem-solving. I'm currently trying to "get a feel of the workforce." I want to first experience the variety of industries that computer scientists can find themselves in, before committing to my masters degree. I believe that technology is the future and I want to contribute towards this objective.

## EDUCATION

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### University of Vermont, Burlington

August 2017 - May 2020

Bachelors in Computer Science, Minor in Mathematics

*Relevant Coursework: Algorithm Design, Data Structures, Programming Languages, Software Engineering, Cybersecurity Defense, Engineering Mathematics and Statistics.*

### University of Vermont, Burlington

December 2019 - Deferred

Masters in Computer Science, Concentration in Machine Learning and Artificial Intelligence

*Relevant Coursework: Evolutionary Robotics, Human-Computer Interaction*

## WORK EXPERIENCE

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### University of Vermont

September 2018 - May 2020

*Undergraduate Teaching Assistant*

- Assisted professors in providing students with extra coursework help/materials. Held weekly tutoring sessions in provided offices and provided lecturers with performance feedback. Collaborated with other teaching assistants and directed in-class coding labs. Additionally held 1-on-1 sessions in subjects including: Languages (ie: Python, Java, C++), Machine Learning, and Algorithm Design

### University of Vermont

December 2018 - May 2019

*Hardware Technical Support*

- Provided phone and in-person support services for public. Used diagnostic tools such as multi-meters to detect and troubleshoot issues on consumer devices. Performed both software and hardware maintenance services on personal (Windows, Mac, Linux) and mobile (IOS, Android) systems.

### Northwestern Medical Center

September 2017 - December 2017

*Speech and Language Pathology Intern*

- Working alongside pathologist Dr. Thomas Suppan, learned to operate in a laboratory setting. Over-viewed basic tissue examination techniques and cooperated with medical staff in running speech rehabilitation exercises. Practiced use of lab equipment to determine sample quality and reported findings in a professional vocal/written manner.

### Saint Albans City Chamber of Commerce

September 2016 - December 2016

*Finance Intern*

- Assisted a city manager and cooperated with various department committees to draft budget plans for the coming year. Cooperated with officials in brainstorming and managing commerce program/policies for the city. Interacted with local businesses to update financial reports and ensure policy compliance.

## PROJECTS

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### Simple URL

Python widget to allow Windows and Linux users to easily shorten lengthy urls. Uses Cuttly API and Tkinter. Users can simply drag and drop (or copy-paste) their original url and the widget displays a truncated version to be copied. Users may reconfigure hotkey combinations to make the process almost instantaneous.

### Batch

Multi-file rename script that allows users to customize how they wish to rename groups of files. Users may choose to opt for a numerical or alphabetized ordering and in addition set 'base' naming parameters. The program utilizes a Tkinter-based GUI however users can also simply run the script in the same directory as their target files using a terminal.

### Personal Website

My site is an ongoing project which I started in order to learn web development. I plan on updating throughout the year as I learn new skills. The domain is hosted by NameCheap and is built from scratch with basic HTML and CSS. The homepage background consists of a javascript game of asteroids which allows visitors to entertain themselves as they try and beat the high scores of previous visitors. Scores and visitor counts are saved into a simple database. The site also provides quick access to my resume, cv, project source codes, and social links.

### RISK

Pygame implementation of the classic board game: RISK. Created in collaboration with 3 other team members. I took on roles of project manager and back-end developer. Users begin the game at an animated menu where they may follow the GUI to start playing, look up controls, or quit. The same exact rules as the board game are implemented here where the objective of players is to conquer the world and defeat other contestants using their armies. RISK implements an divide and conquer AI in single player mode. With multiplayer, up to 6 local players may play consecutively.

### Block Bounce

In a team of three using SCRUM based tactics, a graphics-based runner was created in C++ using OpenGL and glut. Users are provided with an elegant menu where they may choose the map they wish to play on. The game consists of multiple randomly generated walls which the user's character must avoid. The dynamic difficulty and ever changing background provides users with an entertaining experience. A later 3D implementation was created in Unity using the same difficulty algorithm.

### Leap Motion ASL Tutor

The project aims to provide a user friendly graphical interface that uses the Leap Motion API. The algorithm takes 3-dimensional positioning coordinates of the points on a user's hand to teach them American Sign language. The UI and ASL games are controlled by hand gestures. The main menu consists of a play and help button. Users can move their hand over the LeapMotion sensor to move the onscreen controller. Gamemodes include a practice and dynamic learning level. Within these modes, users can learn to sign letters and numbers. To challenge users, basic arithmetic and fill-in-the-blank prompts may begin to appear. The goal is to teach new users the basics of gesturing letters, numbers, and words in a "gamified" way.

### Swarm Seek

Using a Unix-based physics engine provided by Dr. Josh Bongard, a population of robotic beings were evolved mimic the behavior of predator(lion) and prey(gazelle) organisms in a safari environment. By using machine-learning and hardcoded targeting/avoidance metrics, the simulation begins to mirror real predator-prey relationships; as well as team-behavior mechanisms.

## EXTRACURRICULARS

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### **Computer Sciences Club (C.S. Crew)**

*Secretary*

University of Vermont

2018-2020

- Undergraduate student-run computer science club that participates in hosting student led workshops, guided project nights, and research talks.

### **Society of Physics Students**

*Member*

University of Vermont

2017-2018

- Physics-oriented society dedicated to learning more about the universe around us and to teach the public about physical sciences via outreach programs.

### **Film Club**

*Member*

University of Vermont

2017-2018

- Student run club that offers workshops to allow others to engage in the film making process. Events hosted include screen play competitions and showcases for student work.

### **Asian Student Union**

*Treasurer*

University of Vermont

2019-2020

- ASU works to provide an inclusive community for students that identify as Asian/Pacific-Islander and those who are interested in Asian and Asian American culture. The group works to promote multi-cultural understanding of the Asian American experience among members, the UVM community, and across the state of Vermont by hosting charity-driven fundraisers and cultural experiences for the general public.

### **UVM Men's Club Soccer**

*Member*

SGA Club

2017-2019

- Club team competes in semi-competitive divisions and builds community relations. The team collaborates with local middle and high schools to host training camps where players mentor and coach youth teams.

## HONORS

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### **Lufuno Tshikororo Award**

*Recipient*

ALANA Coalition

2020

- Awarded to emerging student leaders who demonstrate outstanding commitment to academic success and community development.

### **Dean's List**

*Honor*

University of Vermont

2017, 2018, 2019

- Awarded to students who maintain a grade point average of 3.0 or better and rank in the top 20 percent of their class in their respective schools or colleges.

### **Justin Morrill Scholarship**

*Recipient*

College of Arts and Sciences

2017, 2018, 2019

- Morrill Scholarships are awarded to admitted Vermont first-year students who demonstrate strong academic performance. Applicants must be enrolled in 12 or more credits per semester and maintain a minimum cumulative grade point average of 3.0. Morrill Scholars are awarded a \$2,000 merit scholarship.

### **Patrick Family Scholarship**

*Recipient*

College of Engineering and Mathematical Sciences

2017

- Awarded to Vermont first-year students who demonstrate outstanding academic performance. Applicants must be enrolled in 12 or more credits per semester and maintain a minimum cumulative grade point average of 3.0. Patrick Scholars are awarded a \$5,000 merit scholarship.

## LICENSES AND CERTIFICATIONS

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### Digital Technology Data Analytics Program

General Electric

*Virtual Experience Program Participant*

2019

- Participated in the open access GE Aviation's Virtual Experience Program with InsideSherpa. Rehearsed data engineering and visualization techniques with real-world datasets on GE's Dataiku environment using postgres/SQL.

### Digital Marketing

Google

*Google Digital Garage*

2020

- Awarded to participants who successfully complete Google's Fundamentals of Digital Marketing certification exam. IAB-accredited course teaches students basics of setting up a successful business online with the use of targeting advertising and analytics data.

## SKILLS

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### Soft

- Software Development (ie: Scripting, Automation, Front-end & Back-end Development)
- Network Analysis & Intrusion Detection
- Analysis (ie: Data Analytics, Business process, Statistics, Models)
- Cybersecurity (ie: Privacy Policy, IDS/IPS, security analysis)
- Leadership (ie: Team Lead, Project Management)
- Teamwork (ie: Collaboration, Co-op, SCRUM (Agile) Methodology)

### Technical

- Python
- Java
- C++
- C
- Structured Query Language (SQL)
- JavaScript
- PHP
- R
- Matlab

### Tools/Platforms

- Windows OS (XP, Vista, 7, 10)
- Linux (Derived platforms, ie: Kali Linux, Android OS)
- Mac OS (X El Captain, High Sierra)
- Mobile Platform (Android/IOS)
- Visual Studio (VS Code, .NET Framework)
- Snort (Network Analysis, IDS, IPS)
- mySQL (Database Management)
- Game Engines (Unity, Unreal Engine, Love)
- Adobe Creative Cloud (Photoshop, After Effects, ect.)
- Microsoft Office Suite & Google Drive (Spreadsheets, Powerpoints, ect.)