Felix He

✉ f26he@uwaterloo.ca · in www.linkedin.com/in/felix-he · ⌂ https://github.com/FelixHe4

SKILLS

Languages: Java, JavaScript, HTML/CSS, Scheme, C++, C, R
Tools: React.js, Node.js, Firebase, Bootstrap, SQLite, Git, Bash, LaTeX

PROJECTS

Competitive Programming - *Java, C++*

- Ranked **top 150** with over **350 problems** solved on the DMOJ contest platform, Canada's largest online judge for competitive programming with **over 50,000 users.**
- Placed in the **top 30** in more than 5 Canadian contests hosted on the DMOJ contest platform.
- Implemented many different **data structures** and **algorithms**, including Balanced Binary Search Trees, Segment Trees, BIT, Kruskal's, Dijkstra's, etc.

ResqUTech - *JavaScript, Firebase, HTML/CSS*

- Used **Bootstrap**, **JavaScript/jQuery** and **HTML/CSS** to create a website, connected to a **Firebase** database to allow victims to check in with their current location.
- Used the **Google Maps API** to show the locations of the victims that were able to check in, allowing others to see where help is required and the urgency of the situation.

PDFEdit - *Python*

- Developed a PDFEditor using **TKinter** to create the user **GUI**.
- Incorporated **PyPDF2** and **DOCX** libraries to simplify conversions of PDF to docx. and docx. to PDF.

Earth Wallpapers - *Java*

- Created a script to download the top 7-10 images on the Earth Wallpaper subreddit using **Java Swing, NET, and AWT.**
- Utilized objects such as a **HashSet, HttpURLConnection, and AttributeSet** to retrieve the HTML data from the page and ensure the uniqueness of images.

WORK EXPERIENCE

Splinterlands   Philadelphia, PA, United States of America
Full Stack Developer - Node.js, AJAX/jQuery, DigitalOcean, LAMP   June 2020 - August 2020

- Built a Blockchain Trading Card Market using **Node.js, AJAX/jQuery and HTML/CSS** to allow Splinterlands players to buy and sell cards, and view various statistics and market history.
- Hosted and maintained the SplintX website using **Agile Methodologies** on a **DigitalOcean Droplet** using a **LAMP** stack.

Triway Education   Richmond Hill, ON, Canada
Math & CS Instructor   May 2017 – August 2018

- Taught various **data structures** and **algorithms** such as **BFS** and **recursion** to help prepare over **60 students** in 3 classes for the **Canadian Computing Competition**.
- Held **200+ lessons** for classes of 20-30, leading to **more than 10 students placing in the top 2%** of **Canadian Computing Competition** Junior competitors.

ACADEMICS & AWARDS

University of Waterloo   Waterloo, ON, Canada
Candidate for Bachelor of Computer Science - GPA: 3.69   Sept 2019 – May 2024

- **Euclid Mathematics Contest - Certificate of Distinction**
  Ranked in the **top 8% of 22169 contestants.**   May 2019

- **Canadian Computing Competition - Certificate of Distinction**
  Ranked in the **top 8% of 2719 contestants.**   March 2019

Relevant Courses: Designing Functional Programs (Advanced Level), Elementary Algorithm Design and Data Abstraction (Advanced Level)