

# William F. Drake

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High achiever across multiple fields returning to software development after completing an international teaching position.

## EXPERIENCE

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### Japan Exchange and Teaching Program (JET)

Oita, Japan

Assistant Language Teacher

September 2021 – August 2023

- Successfully chosen to highly competitive teaching exchange program (JET) managed by the government of Japan.
- Planned and executed English lessons and activities for over 500 students at the high school level and taught special needs students of all ages. Earned highest possible evaluation in all performance reviews.
- Established extracurricular club for students to engage with the English language and learn about foreign cultures. Coached club members to 1<sup>st</sup> and 2<sup>nd</sup> place prizes at the regional English speech contest, for the first time in school history.
- Passed the N3 Japanese-Language Proficiency Test (JLPT, intermediate level Japanese).

### PING

Phoenix, AZ

Software Engineering Intern

June 2021 – September 2021

- Spearheaded the development of an Ionic Angular iOS and Android app that automated the data collection for golf equipment testing, reducing the staff hours required by 40%.
- Developed the app's logic with Typescript, and engineered a SQLite database to store test info and results locally on the device.
- Implemented the automatic transfer of relevant test data between devices and a server via requests to a REST API.
- Built the app's front end with HTML, CSS, and Ionic, after designing a mockup in Balsamiq.

### Tufts Mechanical Engineering Department Research

Medford, MA

Unity Developer

May 2020 – June 2021

- Designed and built a virtual reality simulation using Unity and C# for the HTC Vive to better understand what info soldiers need when operating underground. The simulation was used in a Tufts research test led by a U.S. Air Force Lieutenant Colonel.
- Incorporated the Tobii Eye Tracking SDK and the eye tracking capabilities of the HTC Vive to track subject's eye data.
- Second author on a paper published in the [2021 Proceedings of the Human Factors and Ergonomics Society Conference](#).

### WakeHacks (Wake Forest Hackathon)

Wake Forest University

Director, Executive Team Member

August 2017 – May 2019

- Led a team of 8 students in organizing and running WakeHacks 2019, a 24-hour event.
- Oversaw a total improvement of the event, personally raising \$8,100 in funding through tech sponsors such as Microsoft and leading to over 130 student sign-ups from more than 10 universities.
- Managed the recruitment team for WakeHacks 2018, leading to 93 students signing up for the event.

### Waltham Athletic Club

Waltham, MA

Tennis Professional

Summers 2017 – 2019

### Wake Forest Programming Team

Wake Forest University

Competitive Programmer

August 2017 – May 2019

## SKILLS

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**Languages:** C#, TypeScript, Python, C, C++, Java, JavaScript, SQL, HTML, CSS

**Tools:** Git, Linux, UNIX

**Other:** Angular, React, Ionic, Unity, Agile, Scrum

## PROJECTS

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### Arithmetic Image Compressor

- Developed an image compressor in C that compressed images to 1/3 size with lossy image compression.

### Rocket Man (Video Game)

- Led a 4-person team in creating a 2D Platforming game for PC and Mac using Unity and C#.
- Produced the majority of C# code and designed the core game mechanics.

### Fantasy Sports Optimizer

- Built a Python program that analyzed NHL player statistics to make a profit in daily fantasy sports sites like DraftKings.

## EDUCATION

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### Tufts University

Medford, MA

Bachelor of Science in Computer Science

May 2021

GPA: 3.79

**Relevant Coursework:** Software Engineering, Programming Languages, Data Structures and Algorithms, Intro to UNIX & C, Machine Structure & Assembly-language Programming, iOS App Development

### Wake Forest University

Winston-Salem, NC

Bachelor of Science in Computer Science

Attended August 2017 – May 2019