## CHRISTOPHER KANG

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#### **OVERVIEW**

Goal-oriented student with a passion for helping others. Eager to learn and implement machine learning algorithms. Excited to join impact-driven teams with a commitment to improving others' lives.

#### **EDUCATION**

# University of Washington, Paul G. Allen Center for Computer Science & Engineering

Seattle, WA

Bachelor of Science in Computer Science

September 2018 - June 2022

Direct Admit to the Computer Science program, entering with 90 AP credits

At-large representative on the CSE Student Advisory Committee, 1 of 2 selected Member of the Lavin Entrepreneurship Program (30% acceptance rate)

# Relevant Coursework (GPA: 4.0/4.0)

Accelerated Programming I/II (CSE143X, Fall 2018), Honors Calculus (MATH134-136, Fall 2018-present), Quantum Computing (CSE490Q, Winter 2019), A Study of Mass Incarceration (HONORS345, Winter 2019)

#### **WORK EXPERIENCE & PERSONAL PROJECTS**

# **Pacific Northwest National Laboratory**

Richland, WA

Data Sciences Intern

Summer 2018

- 16,000+ new vulnerabilities were identified in 2018, each requiring a human-generated score for severity
- Quickly learned TensorFlow and independently implemented state-of-the-art ML algorithms in 10 weeks
- Enabled professional scientists with cybersecurity backgrounds to leverage machine learning, allowing the inference of vulnerabilities via graph-based semi-supervised labeling algorithms

#### **Expedition Einstein**

Richland, WA

Co-founder

Summer 2017, 2018

- In Richland, a third of all 5th grade students fail the math and science standardized tests
- Co-founded a nonprofit elementary summer STEM camp for underprivileged youth in the community
- Led funding efforts, creating a 14-page grant proposal, to raise \$1,000+ from community groups
- Designed curriculum, yielding over 30 hours of material. Served 100 K-5 students over two years

Science Fair Richland, WA

Independent Researcher

2015-2018

Pursued independent research throughout high school

- 2017-2018: Designed evolutionary algorithms to enable translation of quantum gate sets
- 2016-2017: Implemented Convolutional Neural Networks to quickly identify melanomas

## **LEADERSHIP ACTIVITIES**

**Key Club**, Vice President

May 2017-2018

- Entered with a 150+ person club, each volunteering <7 hours per year (on average)
- Designed an hour tracking spreadsheet, reducing the time spent inputting hours by more than 50%
- Mobilized members and volunteer opportunities, ending 2018 with each volunteering >14 hours per year

## Blood Drive, Chair

October 2017, 2018

- In previous years, the blood drive failed to get 50 pints of blood from a student body of 1,900
- Identified inefficient donor sign-up process and redesigned system, raising donor signups by 10%
- Led team of >30 students to maintain donor comfort and encourage future donation
- Exceeded blood donation goals by more than 10% both years while fully filling all 105 donor timeslots

#### ADDITIONAL INFORMATION

Skills, Experienced: Python, TensorFlow, Numpy, Pandas, Keras, Sci-Kit Learn, Office suite, Java

Basic: HTML, CSS, JS, Django, Electron, Google AppEngine, Q#, PyQuil, QISKit.