

Christopher Kang

2001 Harris Ave, Richland, WA 99354 <u>ChrisKangMath@gmail.com</u> (509)-319-7199

Education

Hanford High School Class of 2018, 4.0/4.0 GPA Completing high school in three years

SAT: 1570 (800 Math, 770 Reading), ACT: 36

Received 5 on AP Calculus BC, Statistics, Biology, Chemistry, Physics Mechanics, Physics Electricity and Magnetism

Activities & Leadership

Math Club (2015-present)

Treasurer (2016), President (2017–present)

Key Club (2015-present)

Vice President (2017–present)

DECA Club (2015-present)

Treasurer (2016)

Mid-Columbia Youth Symphony

Violin 1 (2015–present)

Research Focuses

2017 – Focused on the applications of Convolutional Neural Networks (CNNs) and other machine learning techniques towards visual identification of skin cancer. Used the International Skin Imaging Collaboration (ISIC) dataset and TensorFlow.

2018 – Developed evolutionary algorithms that efficiently generate quantum gate sets given predefined basis gates.

Skills

Python, including NumPy, TensorFlow, PyQuil, and QISKit. Multiple machine learning projects created through independent research.

Excel/Office; designed numerous spreadsheets for financial, managerial, and exploratory datasets. Experience with graphic design, mailing lists, and equation formatting in Word/Office.

Mathematics; currently taking Multivariable Calculus. Introductory experience with linear algebra, including its applications in quantum computing. Experience with data science, including dataset shaping.

Windows/MacOS/Linux; familiarity with current operating systems.

Science Fair and Math Awards

Math is Cool State competition

2nd in Pre-Calculus (2015) 1st in Calculus (2016) 3rd in Calculus (2017)

Intel International Science and Engineering Fair (ISEF), 4th Place in Robotics and Intelligent Machines (2017)

Washington State Science & Engineering Fair, 1st Place (2013–17)

Mid-Columbia Science & Engineering Fair, 1st Place (2014–18)

Intel's Excellence in Computer Science Award (2016–17)

Volunteer Experience

Co-Founded Expedition Einstein STEM Camp (2017)

Provided two one-week summer STEM camps to local elementary students to encourage love of science.

Received the President's Volunteer Service Award in 2016-18

Key Club (2015-present)

Chaired the science fair at Lewis and Clark Elementary school (30 hours) and two blood drives at Hanford High school (40 hours each). Now serving as VP by tracking hours and managing volunteer events.

Math Fun for Everyone (2016 & 2017)

A fun, explorative math program aimed at primary school students at the public library. Managed 6 summer sessions.