DEREK LU

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EDUCATION

Dartmouth College Hanover, NH Class of 2023	*Major in Computer Science* | **GPA: 4.0/4.0** <u>Relevant Coursework:</u> **COSC 10** (Problem Solving via Object-Oriented Programming), **COSC 50** (Software Design and Implementation), **COSC 60** (Computer Networks), **COSC 55** (Security and Privacy), **COSC 61** (Database Systems), **COSC 31** (Algorithms)
Westwood High School Austin, TX Class of 2019	**ACT: 36/36 | SAT: 1580/1600 | GPA: 5.8/5.0 | International Baccalaureate Diploma** <u>Honors:</u> National AP Scholar (2018, 2019), National Merit Scholarship Finalist (2019)

WORK EXPERIENCE

IPwe Austin, TX June 2020-Sept. 2020	*Cyber Security Intern* • Researched documentation and wrote up evaluations of security implementations based on what they could offer to the company, which were referenced extensively in the progression of IPwe's security initiative. • Obtained hands-on experience in infrastructure security implementations and devops through investigating how security checks in software development can be automated in CI/CD pipelines with Docker containers. • Reviewed and analyzed the security solutions and packages offered to IPwe by a Blue Chip vendor. • Resolved critical exposure of sensitive data on an internal development tool after conducting a review of its configuration.
Dartmouth College Department of Computer Science Hanover, NH March 2020-June 2020	*Teaching Assistant for COSC 50 (Software Design and Implementation)* • Worked in tandem with the professor to advance student understanding of bash and C programming in a class of over 60 students. • Independently graded student lab assignments and hosted three hours of open office hours per week for students of all grades. • Communicated class progress and areas for improvement in weekly TA meetings.
Dartmouth College Institute for Security, Technology and Society Hanover, NH Sept. 2019-March 2020	*Research Assistant for the Dartmouth Institute for Security, Technology and Society (ISTS)* • Synthesized research projects and produced write-ups for publication on the Dartmouth Security and Artificial Intelligence Lab (DSAIL) website, giving other researchers and industry experts a coherent overview of the projects. • Projects covered included how a malware's family can be predicted, sockpuppet social media account detection, predicting a vulnerability's severity based on Twitter data, and others.
American Innovations Austin, TX June 2018-July 2018	*Software Development Intern* • Improved the development cycle of the Pipeline Compliance System (PCS) program by using SQL and Python to update the testing databases, making them more reflective of real data.

EXTRACURRICULAR ACTIVITIES

CoderDojo at Dartmouth January 2020-Present	Volunteer at high schools in the Hanover, New Hampshire area • Mentored high school students with limited computer science resources in problem-solving methods, algorithms, and programming in Python and R.

SKILLS & HOBBIES

Technical Skills: Java, Python, C, Windows, Linux, SQL, HTML, CSS, JavaScript
Languages: English (native), Chinese (proficient), French (intermediate)
Hobbies: Exploring and playing unconventional video games, nighttime fishing, playing D&D, looking through historical and contemporary conflict documentation, and appreciating the flora and fauna on an excursion