

LAWRENCE TSAI

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EDUCATION

University of Toronto - Trinity College

September 2020 - Present

Honours Bachelors of Science Candidate-Physics (Major), Math (Major), Chemistry (Minor)

· **Relevant Coursework:** Computer Science: Math Expression & Reasoning for CS/Software Tools & Systems Programming Physics: Dark Matter & Energy/Practical Physics I/Elec & Mag/Classical Mech Math: Lin Alg I/Multivariable Calc w Proofs/ODEs/Complex Variables Chemistry: Analytical/Physical(Thermo & Quantum)/Inorg/Org Chemistry Other: Phil of Physics & Science, Human Physiology I, Latin I

· **Activities:** Trinity College Literary Institute Prime Minister, Amateur Astronomer's Society Vice President, Stephanos Yearbook Editor, Kappa Alpha Literary Society Vice President, Wallball and Dodgeball Captain, Food Advisory Committee Member

Council Rock High School North

August 2016 - June 2020

Diploma with Distinguished Honour Roll

Newtown, PA, USA

GPA: 4.283/4.0 SAT: 1580/1600 ACT: 35/36 ASVAB: 97/100 AMC 8: 24/25

· **Relevant Coursework:** AP Bio & World History, Honours Experimental Research in STEM, Biochem (Delval Uni), Stat II (Bucks CC)

· **Activities & Awards:** Future Business Leaders of America National Qualifier, Johns Hopkins Center for Talented Youth Member, Grade 11 Regional Top 3 in Atlantic Pacific Math Contest, AP Scholar with Distinction Award, Leader of Math OWlympiad Top 5 Team, National French Contest-Bronze, Bucks County World Language Competition-1st, Chemistry Club President, Track & Field Captain, Varsity Wrestler

SKILLS AND INTERESTS

Software Skills Projects

Python, Java, MATLAB, Django, Docker, Figma, Ansys, Open CASCADE, IfcOpenShell Amigos (Friend Matching) Webapp (Java, Javascript, CSS, HTML, Figma, Linked)

Certifications

Self Driving Cars 4-Course Specialization by the University of Toronto (in progress)

Languages

English, Mandarin, Taiwanese, French (3 Years), Latin (Elementary), Spanish (Elementary)

Art and Literature

Happy Collection (Completed 71-part abstract art), Pleasure and Torture (writing in progress)

Hobbies

Chess, Pilot, Weightlifting, Music (Trumpet, Violin, Piano, Vocal), Outdoor Activities, Cooking

Favourite Youtube Channels

3Blue1Brown, Crash Course, Kurzgesagt, Khan Academy, TED-Ed, Sciencephile, Aperture, exurb1a

EXPERIENCE

Promise Robotics

Software Engineer

May 2022 - Present

Edmonton, Alberta, Canada

4 month internship in software (**Python, Django, Docker, Open CASCADE, IfcOpenShell, Databases**), robotics, and **CAD** to create affordable and sustainable with applied Physics and machine learning. <https://promisrobotics.com/>

Blue Sky Solar Racing

Senior Technology Strategist

May 2021 - Present

Toronto, ON, Canada

Conducting research, fabricating, creating parallel computed simulations (**Matlab, Python, Ansys, CAD**), & creating StratApp to optimize a solar car for American and World Solar Competitions. <http://blueskysolar.utoronto.ca/>

University of Toronto Aerospace Team - Space Systems

Optics Team Member

May 2022 - Present

Toronto, ON, Canada

Numerical analysis (**Python**) and research for optics (holographic gratings) of our satellite payload. <https://www.utat.ca/space-systems> Github: <https://github.com/spacesys-finch>

Felicity App

Manager and Founding/First Member

September 2020 - Present

Ontario, Canada

Non-profit of 160+ people developing a productivity app using expert's psych research. <https://www.felicityapp.org/>

University of Toronto Applied Trading Club

Co-President and Founder

August 2021 - Present

Toronto, ON, Canada

Founded club of 140+ members to use machine learning and financial knowledge applied to stock & crypto trading

PennyDrops

Co-Founder and Vice President-Marketing

May 2021 - Present

Toronto, ON, Canada

Co-founded a new chapter of PennyDrops at UofT, overseeing marketing for the biggest PennyDrops chapter that aims to cater to 30+ schools with 1,000+ students for accessible financial education. <https://www.pennydrops.org/>

L & S Landscaping

Chief Executive Officer and Founder

March 2019 - Present

Lower Bucks County, PA, USA

Managed 25+ Employees, Five Figure Company, 100+ Customers in a 35 kilometer radius, Coordinating with other businesses, responsible for financials, quoting, marketing, and public relations. <https://ls-landscaping.business.site/>

University of Toronto-Trinity College

Academic Advisor

September 2021 - Present

Toronto, ON, Canada

Coordinated academic events and aided students in Chem, Physics, & Math within a college of 1800+ students