

SARAT (MATTHEW) LOWE

EXTRACURRICULARS

Boost-Walker (Inventor)

- Designed and built a walker with a safety harness and weight support, enabling patients to independently perform physical therapy exercises and monitor their progress
- Built 3 devices and donated them to Ratchaburi Hospital, Mae Lao Hospital, and Srisangwal Pediatric Physical Therapy Center
- Won Gold Medal at iCan Innovation and Invention Competition

GoBabyGo Thailand (Co-Founder and Nationwide Chief Engineer)

- GoBabyGo is an organization that modifies ride-on toy cars to empower disabled children with independent mobility
- Started first chapter of GoBabyGo in Thailand at RIS
- Helped start four additional Thailand chapters at ICS, Shrewsbury, NIST, and BPS
- Donated 30 cars to children's disabilities organizations
- Standardized building method by writing a manual customized for part available in Thailand
- Developed quality assurance process and installed safety features such as seatbelts and sensors
- Taught more than 100 active members the method of building

L&E Lighting Company (Outdoor Architectural Lighting Designer)

- Studied lighting design for Wat Arun (the Temple of Dawn)
- Wrote and designed graphics for brochures to sell lighting design projects to foreign countries
- Proposed IOT sensors to keep track of LED conditions at Wat Arun. Saved costs and electricity

School Clubs

- President of Student Council, President of STEM club, Leader in National Honor Society

Athletics

- Varsity Softball Team (Captain), Varsity Basketball Team, Varsity Tennis Team, Bangkok All Stars Baseball Team

RESEARCH

Automatic Speech Recognition Research

- Joined Department of Computer Engineering at Thammasat University to develop first ever automatic speech recognition app for Thai hospitals
- Head of data processing
- Codified audio recordings from nurses to train software using TensorFlow machine learning platform
- Developed tool to automate data preparation process

ADDITIONAL SKILLS

- Piano (ABRSM Grade 6), Music Theory (ABRSM Grade 5), Chinese Language (HSK Level 3), Aspiring Sushi Chef, Spirulina Activist, Skateboarding



EDUCATION

Ruamrudee International School
(4.11 Weighted GPA)

Course medals

- Introduction to Chemistry and Physics (9th grade)
- Outstanding Student Award in mathematics, science, and social sciences (11th grade)

Online courses

- Outlier: Intro to Microeconomics, Intro to Statistics
- VHS: AP Computer Science A
- JHU: Multivariable Calculus

AP Scores

- 11th grade: AP Physics 2 (5), AP Calculus BC (5), AP Statistics (5), AP Microeconomics (5), AP Macroeconomics (5), AP Computer Science A (4)
- 10th grade: AP Physics 1 (5), AP Biology (4)

HONORS AND AWARDS

Academic Competitions

- iCan Invention and Innovation Competition Gold Medal and Best Young Inventor Award
- CEMC Math Competition Distinction
- AMC Math Competition Distinction
- Korea International Youth Olympiad Silver Prize

School awards

- Father Griffith Scholarship
- Honor Roll (2019-2022)

CONTACT INFO

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