Ryan Maudgalya

Student of **NIST** International School of Thailand, **Year 13**

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ACADEMIC SUMMARY

Academically **diligent**, **multifaceted**, and **goal-oriented** with a willingness to try new things and appreciate the process of learning. Experienced in multiple computer science related fields including: Data visualization, Front end development, and Data structure and algorithms. Proficient in a multitude of coding languages such as Python, JavaScript, and Java and is always ready to learn at every opportunity.

PAST EXPERIENCE

Experience in CAD design with Fusion 360, designing mechanical components for Hallong

- I have a **developed** understanding of **CAD design software, Fusion 360,** with which I was able to create a multitude of different components for different projects. **An outstanding design** of mine was designing an **air-gas mixer for a CNG vehicle**. This component was taken by the company and commercialized for **hundreds of vehicles**. Fusion 360 was used to create the specific component after hearing what my project's requirements and specifications were.

Building Web Applications

- I possess a solid grasp of web development, and my proficiency with **various tools** and **technologies** is evident in the web applications I've crafted. Notably, I leveraged **WebRTC** to engineer real-time communication features in a collaborative project, seamlessly enabling video and audio interactions. In another venture, I harnessed the power of **jQuery** to enhance user interface responsiveness and deliver dynamic content, ensuring a smooth and engaging user experience. Additionally, I've employed **Chart.js** to create visually appealing and interactive data visualizations, facilitating data-driven decision-making within web applications. My approach prioritizes **understanding project requirements** and specifications, which I **meticulously translate** into well-crafted web solutions that meet user needs effectively.

VEX competition robot building

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SKILLS

Team Management I
CAD Design I Creativity I Critical Problem Solving I Communication I Market research I
Aptitude to learn I Problem breakdown

EDUCATION

Studying at NIST international school Bangkok, Thailand.

LANGUAGES

English - Native proficiency
French - Intermediate (B1)
Assamese - Intermediate
Hindi - Beginner

FUNCTIONAL SKILLS/IT SKILS

Python – Data Visualization, Full Stack Development, Data structures and Algorithms
JavaScript – Front-end development
Svelte-kit – Full stack development
Java – Data structures and Algorithms
C- Data structures and Algorithms

Neon Infotech

- I learned about the inner workings of a large tech corporation and was able to learn and use **state of the art software used in industrial settings**. The internship dealt with the technology aspect of using a variety of different software to create **architectural plans** for large establishments. It allowed me to understand the real-life applications of computer science used at a large scale and revealed the inner machinations of the software itself.

Lead developer at NistTech

- I had the privilege of serving as a Lead Developer at NistTech. During my tenure, I conceptualized and implemented an **international coding competition** and grading platform that garnered participation from over **50 talented individuals** spanning the globe. This initiative not only fostered a spirit of collaboration and innovation but also generated nearly **10,000 baht** in funds. My role at NistTech allowed me to showcase my leadership, problem-solving, and programming skills on a global scale, underscoring my commitment to advancing technology and education.

Leader of Second Chance @ NIST

- In my role as the leader of the Second Chance Bangkok Initiative, I had the honor of **spearheading** a project that aimed to empower and **uplift women in the Klong Toey slum** by providing them with a second chance to improve their lives. Our initiative focused on **enabling** these talented women to create and sell their handcrafted fabric products, thereby helping them gain financial independence and a renewed sense of purpose. Through our efforts, we were able to **reinvest the proceeds directly into the lives of these remarkable individuals**, offering them a brighter future. This experience has not only allowed me to make a tangible impact in the lives of marginalized communities but has also **strengthened my leadership, organizational, and community engagement** skills.

Mathletics Executive Member

- As an active member of the "Mathletics" Math Club, I took on a dynamic role in organizing and hosting various math competitions and events while also crafting challenging problems that stimulated the mathematical curiosity of younger students. This experience was incredibly rewarding as it provided a platform for students to engage with mathematics in a fun and competitive way. In addition to my responsibilities as an event coordinator, I dedicated time to teaching younger kids fundamental math concepts, fostering a deeper appreciation for the subject. My involvement in "Mathletics" not only allowed me to share my passion for mathematics but also helped me develop strong leadership and pedagogical skills, shaping my commitment to promoting the importance of math education.

POSITIONS OF RESPONSIBILITY

- **Events manager for the High school student council**
  - I have run many important events in our school such as year-end assemblies, spirit days, and bi-weekly school wide events that more than 300 students take part in. It has taught me a lot about planning, time management, as well as networking which are all valuable skills.

- **Founder and Leader of a social enterprise, "Edibubble"**
  - I am also the founder of my own social enterprise which has been launched at NIST and outside communities. It is a non-biodegradable packaging alternative group that is working towards reducing the huge waste that is produced from non-biodegradable packaging. We have created membrane filled juice and water bubbles that can store liquids in an eco-friendly, edible way. It has taught me a lot not only about planning and leadership but also in chemical analysis and its applications to solve real problems

- **Delegate for Model United Nations, representing NIST in an international conference**
  - I have also represented NIST in an international MUN conference in Singapore by representing Germany in General Assembly 3. We explored the problem of the research and distribution of covid vaccines in the world during the conference. This has helped me improve my speech skills as well as my debate skills. I was also nominated for Best Beginner Delegate

- **Leader for the school music band. "Algorhythm"**
  - I am one of the lead vocalist and lead electric guitarist of our school band that I had founded with some of my friends. We constantly perform at many different events such as fundraisers and school events. It has taught me how to coordinate a group, play, learn, and perform in an ensemble/group setting, and collaborate with like-minded musicians.

ACADEMIC ACHIEVEMENTS

- Achieved distinction in the Waterloo Math competition in Thailand consecutively for 4
- years from Grades 7-10
- Achieved academic excellence award in MYP for grades 7, 8, 9, 10, and 11 (receiving 55 or
- 56 out of 56 IB points in final report card)
- Achieved the Bronze Duke of Edinburgh International award in 2021
- American Mathematics Competition Participant
- NIST Annual Computer Science Competition Winner 2023
- DualHacks 2023, Winner

AWARDS

- Achieved 2nd place in the Thailand national VEX robotics competition for 2021-2022

- Achieved 4th place in the Thailand international VEX robotics competition for 2022-2023

- Won best Hack in international DualHacks 2023 Hackathon, sponsored by Google, Desmos, Wolfram Alpha, etc.

- Graduated with distinction and received a diploma from Trinity college of London for electric guitar

- Received the 2rd highest national mark in Thailand for electric guitar from the Trinity college of London exams in Grade 8

- Received the 3rd highest national mark in Thailand for electric guitar from the Trinity college of London exams in Grade 3

- Represented NIST and won in a varsity setting for Tennis in different inter-school competitions such as BISAC

EXTRA CURRICULAR INTERESTS

- Lead builder and programmer for VEX robotics national competitor group

- Model United Nations delegate for Germany

- Member of the High school choir as a lead tenor

- Varsity Tennis (boys)

- Guitar lessons for 7 consecutive years

- Singing lessons for 5 consecutive years

- NIST Super Falcons tennis academy for 2 consecutive years