# **Ansh Verma**

Ambitious high school senior with a passion for technology and computer science. Enjoys solving challenges and strives to make a positive impact on my community through technical skills and leadership.

## **Education**

Interlake High School (2018 - 2022)

**GPA**: 4.0/4.0 **SAT**: 1560/1600 **PSAT**: 1460/1520

AP/IB Courses Completed (Score): AP Comp Sci A (5), AP Human Geography (3), AP Modern World History (3), IB Chem SL1, IB Math Applications & Interpretations HL1/HL2, AP Physics 1 (4), IB Lang & Lit HL1, IB Spanish 2/3/4 AP/IB Courses in Progress: AP Calc AB, AP Physics 2, IB Lang & Lit HL2, AP US Gov, IB Business & Management SL Certification (Certifier): Data Science and Data Engineering (Data Science Dojo + University of New Mexico),

DAT263x Introduction to Artificial Intelligence (Microsoft) **Awards:** National Merit Semifinalist, AP Scholar with Honor

## **Research Experience**

## **Researcher, University of South Florida** (11<sup>th</sup> – 12<sup>th</sup> Grade)

- Analyze datasets from the city of St. Petersburg, Florida to determine whether there is evidence of racial bias on home loan approval rates; will be listed as contributor when the paper is published
- Work under the guidance of Professor Johannes Reichgelt, USF School of Information Systems and Management, University of South Florida
- Determine the underlying causes of the inequalities in the given population dataset
- Produce custom visualizations using Power BI and ArcGIS maps based on the analysis
- Meet with Professor Reichgelt on a weekly basis to share outcomes and brainstorm potential trends to analyze

## **Community Impact**

## Founder, One Stop Impact (11<sup>th</sup> – 12<sup>th</sup> grade)

- Founded a <u>nonprofit organization</u> to help local businesses
- Build free websites for small businesses and customize them to meet their needs
- Help small, minority owned businesses that need support transitioning to online services
- Inspire and lead high school peers to use technology to contribute to the community

## **Councilmember, Bellevue Youth Council** (11<sup>th</sup> – 12<sup>th</sup> grade)

- Organize and plan various community projects based on Bellevue youth priorities
- · Partnered with Bellevue Firefighters Community Support Foundation in planning for the holiday toy drive
- Tutor middle school students and help with their schoolwork in Math, Science, and Spanish

#### **Computer Science Experience**

#### **Software Engineering Intern, Internity Labs** (10<sup>th</sup> – 12<sup>th</sup> grade)

- Worked on the development of a mobile app "Win-X Launcher" using Xamarin. Android, C#, and Visual Studio
- Redesigned the company and app logo using Adobe Photoshop and Illustrator
- Edited short infomercials for YouTube using Adobe Premier Pro
- Implemented Google Payments feature to allow customers to do in-app purchases
- Worked with the development team on feature prioritization, intuitive UX, and unified UI design

#### **Technical Lead, Programming/Cybersecurity Club** (9<sup>th</sup> – 12<sup>th</sup> grade)

• Co-led the projects development team of approximately 20 people

- Taught students about the different frameworks we would be using and planned lessons ahead of meetings
- Won a friendly coding competition in September 2020
- Participated in an online Capture the Flag (CTF) challenge to defeat common cybersecurity weaknesses
- Built a variety of productivity and utility webapps, both individually and as a group

## **Programmer, Independent Projects (Ongoing)**

• Familiarized myself with many programming languages by developing apps using Java, React Native, TypeScript, C#, Azure, Python, and Flutter

#### **Creator and Writer, Medium Blog** (Ongoing)

- Created a tech blog on <u>ansh-verma.medium.com</u>
- Write to explain my opinions and understandings of current topics and developments in technology

### Participant, Al4ALL (11<sup>th</sup> grade summer)

• Examined the opportunities and challenges introduced by artificial intelligence and examined the effect of AI solutions on basic values, such as fairness, trust, and inclusiveness

## Participant, Data Science Dojo (10<sup>th</sup> grade summer)

- Studied in a 16-week boot camp learning the fundamentals of data science and techniques used in Machine Learning and AI
- Learned to explore, visualize, and cluster data; built and evaluated predictive models for classification and regression; designed online experiments; managed big data in the cloud, introduced to text analytics and built an end-to-end internet of things (IoT) solution
- Certified by University of New Mexico and Data Science Dojo

## Participant, InspiritAI (10<sup>th</sup> grade summer)

 Created object detection for self-driving cars using three separate algorithms – Convolutional Neural Network (CNN), YOLO Neural Network, and Perceptron Neural Network – that detected objects such as cars, pedestrians, traffic lights, trucks, etc

#### **Programming lead, Robotics Club** (10<sup>th</sup> Grade)

- Worked on movement control system and PID programming
- Mentored new members and taught them how to use Git source control

#### Competition Judge, Computing for All (9th grade)

· Graded and evaluated software projects made by approximately 300 middle school students

#### **Additional Extracurricular Activities**

#### **Photographer** (10<sup>th</sup> - 12<sup>th</sup> grade)

- Photographed many pictures of landscapes and nature
- Uploaded to an online portfolio, gaining the views of thousands of people

## **English Teacher, De'haat Project** (10<sup>th</sup> grade)

- Taught the basics of English and how to read and speak to a group of 5-6 primary school teachers in India
- Started from scratch as many of the teachers went from zero knowledge of English to be able to teach their own English classes

# **Team Member, Cross Country/Track and Field/Soccer** (9<sup>th</sup> – 10<sup>th</sup> grade)

Improved my athletic ability and stamina while reducing my 5k time by over 5 minutes in of 3 months

•	Played as the sweeper on my soccer team. My role was to ensure no attackers could get past the defensive line and act as the last line of defense if all the other defenders fail.