

KUSH BAVARIA

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ACADEMICS

Salutatorian at Vista Ridge High School, Cedar Park, TX

Class of 2021

Will have completed 31 AP, Pre-AP, Dual Credit, and Honors level courses by the time I graduate my high school.

Selected Courses:

AP Calculus BC: 5	AP Computer Science A: 5	AP Computer Science Principles: 5
AP Physics C: E&M: A*	Multivariable Calculus	Pre-AP CS1
AP Biology: A*	Digital Forensics Honors	Multivariable Calculus Dual Credit
AP Chemistry: 5	AP Statistics: A*	Anatomy and Physiology Honors
AP Macroeconomics: 5	Data Structures (Post AP)	AP Physics C: Mechanics: A*

*Future AP Test Denoted with 'A'

Rank: 2/551 (Top 0.36%), **GPA: 4.0/4.0, 5.738**, **Total AP Classes: 15.**

ACT: 35/36, 35 M, 34 E, 34 S, 36 R

AP Ambassador for AP Computer Science Principles

Member: National Honor Society

Member: National Spanish Honor Society

Member: National English Honor Society

Member: National Art Honor Society

Texas Computer Science Academy, University of Texas at Austin

Summer 2020

- Selected to participate in the 2020 Texas Computer Science Summer Academy from June 15 - June 25. Certificate available [here](#)
- Listened to lectures from numerous university professors and important community figures including Dr. Calvin Lin, Jen Duncan, Dr. Alison Norman, Scott Munro, Dr. Sarah Abraham, Sierra Acy, and many others
- Visited numerous UT Austin facilities including VRBO, GDC Building, and many more

EDX Computer & Data Science, Harvard University

Apr 2020 – Present

- Will have completed 4 EDX courses by the time I graduate high school: Introduction to Linear Models and Matrix Algebra, Data Science: Linear Regression, Data Science: Machine Learning, Data Science: Visualization

Austin Community College

Aug 2017 – Present

- Will have completed 3 Dual Credit courses by the time I graduate high school: US Government (2305), US History (1301), Multi-Variable Calculus (2415)

RESEARCH

Optimal Taxation of Entrepreneurs- [Wharton School](#), University of Pennsylvania

May 2020 – Present

Summer: (35hrs/wk) School Year: (10hrs/wk)

- Worked as a Research Assistant with Professor Kent Smetters, Boettner Professor, Department of Business Economics and Public Policy
- Focused on finding information related to the wealth and equity held within startups using SEC S-1/S-1A filings and optical computer recognition to find shares held within the filings
- Developed and analyzed numerous Python Pandas data frames to extract content and find correlations within the data and used SQL to submit data and batch jobs to the Wharton Research Services Lab

Finding Economic Progression within Poems & Songs- [Department of Economics](#), Brown University

June 2020 – Present

Summer: (15hrs/wk) School Year: (7hrs/wk)

- Worked with Professor Stelios Michalopoulos, Associate Professor of Economics & a Research Associate at the NBER
- Developed Python & R scripts for translating lyrics from a given data set into a different language
- Wrote Python code for Latent Dirichlet Allocation (LDA) topic modeling of lyrics from the Million Song Dataset and NHS-Ethnography Dataset. Used NLP to analyze significance of topic modeling clusters
- Created algorithm for determining Compute Model Perplexity and Coherence Score within a topic modeling cluster
- Wrote HTML/JSS code for Amazon Mechanical Turks selection screen

Analyzing Impacts of Acidic Solutions on Roofing Material- Austin Energy Science Fair

Sep 2017 – May 2018

- Analyzed current roofing materials used in developing nations in order to create a roofing coating that will withstand acidic rain using statistical analysis and CAD rendering

EMPLOYMENT

Senior/Lead Instructor & Curriculum Developer, Code Ninjas Cedar Park, #1 Code Ninjas Internationally Sep 2018 – Present
Summer: (6hrs/wk) School Year: (6hrs/wk)

- Taught students many coding languages including JavaScript, Lua, and Python.
- Led our employee team to help make the Cedar Park location the number one location internationally for 2 years
- Developed a curriculum for teaching younger students under the age of 7
- Lead Instructor for online classes and activities during COVID-19

Co-Founder & CEO, Boaring Application, www.boaringapp.com Dec 2019 – Present
Summer: (10hrs/wk), School Year: (3hrs/wk)

- Created online platform and website with HTML, CSS, and JSS
- Directed a development team of 12 students in creating the Boaring Application (Ongoing)
- Wrote business plan and submitted to numerous venture capital funding organizations

Financial Planning intern, Modern Woodmen of America May 2019 – Aug 2019
Summer: (40hrs/wk)

- Liaised with MWA and the community, fostering relationships with existing and potential clients
- Elicited contact with over 100 clients to generate business for Modern Woodmen
- Advised clients on 401k plans and learned to sell life insurance plans
- Recommendation letter from mentor available [here](#)

Business Development Intern, [Icon World Of Tiles](#) May 2018 – Aug 2018
Summer: (40hrs/wk)

- Helped identify process improvement opportunities to build streamlined and scalable solutions
- Assisted in the development of business cases for new programs and services
- Participated in the development, maintenance and improvement of performance metrics dashboards

Real Estate Agent Assistant, [All City Real Estate](#), Austin, TX Jan 2019 – Jun 2019
School Year: (2hrs/wk)

- Represented 4 buyers in first six months
- Researched diligently to find perfect home for clients based on given criteria
- Went on appointments with clients and showed homes based on criteria
- Got clients under agreement once perfect home had been found

CLUBS & ORGANIZATIONS

Team Lead (11th, 12th), Software Lead (10th), 6990 Vista Ridge High School Robotics Team– Texas Regional Champions (9th - 12th)
School Year: (7hrs/wk), (35wk/yr)

- Top 100 internationally for FTC Robotics during 2018-2019 Season (2019-2020 worlds canceled due to COVID-19).
- Led a team of 16 students to create a competition specific robot
- Developed B-Spline and Pure Pursuit path development and management algorithms
- Competed at 10+ tournaments where my team received over 15 awards including ARM's Control Award for best software integration. [Award application](#). [Team record for 2019-2020](#)

Director Of Technology(10th) & [State Officer Candidate\(11th\)](#), Vista Ridge High School DECA (9th - 12th)
School Year: (4hrs/wk), (30wk/yr)

- Competed in International competition and became a finalist amongst 200+ other students placing in the top 20 both years (2020 ICDC canceled due to COVID-19)
- Managed all technology aspects of Vista Ridge High School DECA, including the development of communication channels
- Consulted various businesses on marketing operations. Sample consultation paper available [here](#)

Co-President, Co-Founder, Make-A-Wish Club - <https://sites.google.com/view/vistaridgehighschoolmakeawish> (9th - 12th)
School Year: (2hrs/wk), (35wk/yr)

- Founded a school wide chapter of the Make-A-Wish club to support the Make-A-Wish foundation on campus
- Organized meetings to conduct volunteering for the Make-A-Wish Foundation
- Created clear communication channels on various social media platforms

President (12th), Secretary (11th), Digital Forensics Community Association, Student Lead Cyber Security Group (11th - 12th)
School Year: (1.5hrs/wk), (25wk/yr)

- Led a team to participate in PICOCTF Digital Forensics Competition, earning over 10,000 points
- Taught students on numerous cyber security related applications and computer ethics

Vice-President(12th), Diversity Club, Vista Ridge High School (10th- 12th)
School Year: (1hr/wk), (35wk/yr)

- Developed material for meetings and created communication channels
- Tracked members and managed outreach to future members
- Communicated with community leaders to help create inclusion

Member, Save The Planet Earth Club, Vista Ridge High School (10th-12th)
School Year: (1hr/month), (20wk/yr)

- Attended monthly meetings for the Save the Planet Earth Club and learned about environmental conservation

COMMUNITY IMPACT

Youth Activities Leader and Event Speaker, BAPS Swaminarayan Sanstha Temple, Austin, TX Sep 2012 – Present
(5hrs/wk), (2000+ hrs), (52wk/yr)

- Taught adolescents & college aged youth about teachings of Lord Swaminarayan & Hinduism
- Served attendees mahaprasad (dinner) after the main assembly, mopped kitchen & bathroom floors, washed dishes, pots & pans and vacuumed the assembly hall
- Participated in festive performances & assist in designing sets for theatrical productions. Pictures available [here](#)

Volunteer, Congressional Campaign Staff, (20+ hrs) Jun 2020 – Jul 2020

- Congressional campaign staff for Dr. Pritesh Gandhi (TX-10)
- Personally, contacted over 100 potential voters to inform them about Dr. Pritesh Gandhi's policies

Volunteer, Nature Conservancy, (150+ hrs)- <https://www.nature.org/en-us/> Jul 2015 – Jul 2019

- A non-profit helping to fight climate change and helping preserve the environment for future generations
- Personally, raised over \$1,000 for the organization in a span of 4 years through door to door solicitation

SELECTED ACHIEVEMENTS, HONORS, AND LANGUAGES

National AP Scholar (11th), AP Scholar with Distinction (10th) Jul 2020

- Granted to students in the United States who receive an average score of at least 4 on all AP Exams taken, and scores of 4 or higher on eight or more of these exams

National Merit Commended Scholar, (11th-12th) Sep 2020

- Awarded to students within the top 34,000 of all 1.6 million students to take the 2019 PSAT

DECA ICDC Finalist (9th, 10th) (11th Canceled due to COVID-19) Apr 2018 – Apr 2020

- Ranked Top 20 internationally against more than 300 other teams in the Integrated Marketing Series Services (2020 ICDC canceled due to COVID-19)

First Tech Challenge Robotics Regional Alliance Champions (10th, 11th) Feb 2019 – Feb 2020

- Division winning alliance competing amongst 40 other teams in the Austin – San Antonio metro area
- 2nd Place competing amongst 88 other teams in the Austin metro area

First Tech Challenge Robotics Regional and Local ARM Control Award (11th) Jan 2020 - Feb 2020

- Awarded to the team that displays the most software complexity amongst 30 other teams in the Austin – San Antonio metro area
- Awarded to the team that displays the most software complexity amongst 30 other teams in the Austin metro area

Texas DECA State Winner (9th, 10th, 11th) Feb 2018 – Feb 2020

- Ranked Top 8 in the state against more than 100 other teams in the Integrated Marketing Series Services

Austin Regional Science Qualifier (9th)**Feb 2018**

- Selected amongst 200+ other students to represent Vista Ridge High School in the Austin Regional Science Fair

Colins Aerospace Innovate Award 2nd (11th)**Feb 2020**

- The Collins Aerospace Innovate Award celebrates a team that thinks outside the box and has the ingenuity, creativity and inventiveness to make their designs come to life
- Awarded amongst 30 other teams in the Austin – San Antonio metro area

Texas DECA District 5 Winner (9th, 10th, 11th)**Jan 2018 – Jan 2020**

- Ranked Top 8 in the district against more than 50 other teams in the Integrated Marketing Series Services

Languages

- English- Native or Bilingual Proficiency
- Hindi- Native or Bilingual Proficiency
- Gujarati- Native or Bilingual Proficiency
- Spanish- Limited professional proficiency
- Urdu- Limited professional proficiency

SOFTWARE AND INDUSTRY SKILLS**FTK Imager & OS Forensics**

- Highly skilled in using FTK forensics imager for digital forensics and crime investigations
- Knowledgeable in using OS forensics for volatile data extraction and decryption of certain security certificates
- Reference can be obtained by emailing Jose.Villalpando@leanderisd.org

Amazon Web Services Toolkit

- Experience using multiple Amazon Web Services including Mechanical Turks and EBS cloud machines
- Reference can be obtained by emailing Stylianios_Michalopoulos@brown.edu

Programming Languages

- Java – Full Proficiency, references available by emailing: Juan.Flores@leanderisd.org or Dennis.Bonsall@leanderisd.org
- Python – Full Proficiency, reference available by emailing: smetters@wharton.upenn.edu
- JavaScript – Proficient, reference available by emailing: jesus.sotelo@codeninjas.com
- HTML/CSS – Proficient, reference available by emailing: Stylianios_Michalopoulos@brown.edu
- R – Proficient, reference available by emailing: Stylianios_Michalopoulos@brown.edu
- Lua – Proficient, reference available by emailing: jesus.sotelo@codeninjas.com
- Go – Beginner
- GitHub: <https://github.com/kushbavaria>