
HENRY ISAO WATANABE

PROFILE

Personal Information

Name	Henry Isao Watanabe (Hank)
Sex, Birthdate	Male, 07/16/1998
Address	Irvine, CA
Race/Ethnicity	Asian (Japanese)
Religion	Christian

Language

English	First Language, Speak, Read, Write, Spoken at home
Japanese	First Language, Speak, Read, Write, Spoken at home

Citizenship

Citizenship Status	US Citizen
Birthplace	Philadelphia, PA

FAMILY

Household

Parents	Married
Home	Both Parents

Parent 1

Name	Father – Kelan A. Watanabe, address: same as my home address
Birthplace	Seattle, WA
Occupation	Engineer
Education	California Institute of Technology, BA, PhD

Parent 2

Name	Mother – Naomi I. Watanabe, Address: same as my home address
Birthplace	San Francisco, CA
Occupation	Lawyer
Education	University of CA, Los Angeles, BA; University of CA, Berkeley, J.D.

Siblings

Name(s)	Dorothy Midori Watanabe, sister, 15 years old, 10 th grade
----------------	---

HENRY ISAO WATANABE

EDUCATION

School **Galileo Science Academy (Grades 9-12)**
Irvine, CA
University of California, Irvine (Dual enrollment 2015-2016 for Advanced Math Courses)
Irvine, CA

Senior Year Courses

Galileo Academy

Senior English – Full Year
AP Physics C: Mechanics – Full Year
United States Government/Economics – Full Year
AP Computer Science – Full Year
Robotics 2 – Full Year

University of California, Irvine – Dual Enrollment

Multivariable Calculus – Fall Quarter
Introduction to Linear Algebra – Winter Quarter
Elementary Differential Equations – Winter Quarter

Honors and Awards

Robotics Club – Captain (2015)

Future Plans

Prospective Major(s)	Computer Engineering
Career Interests	Artificial Intelligence & Computer Programmer
Highest Degree Intended	Ph.D.

HENRY ISAO WATANABE

TESTING

SAT – Galileo Academy:

Critical Reading: 536

Mathematics: 547

Writing: 563

SAT – Henry Isao Watanabe: Taken: 1 Planned: 0

05/2015

Critical Reading: 530

Mathematics: 800

Writing: 600

SAT Subject Tests – Henry Isao Watanabe:

Mathematics Level 1: 800 Mathematics Level 2: 800

ACT – Galileo Academy:

Composite: 24 English: 27 Math: 26 Reading: 24 Science: 22 English/Writing: 23

ACT – Henry Isao Watanabe: Taken: 0 Planned: 0

ACTIVITIES

School Activity

11, 12

10 hw 40 wy

“Deep Blue” – The Computer Club

President – senior year

School Activity

11, 12

2 hw 40 wy

Robotics Club

Vice-President, Junior year

Internship

12

20 hw 10 wy

The Aerospace Corporation, El Segundo

Intern, IT Department

Various projects using C++ and Java

HENRY ISAO WATANABE

TRANSCRIPT

Galileo Academy
1687 Newton Drive
Irvine, CA 92604

Transcript for Henry Isao Watanabe

Grade 9 (2012-2013)	Fall	Spring	Grade 10 (2013-2014)	Fall	Spring
Freshman English	C+	B-	Sophomore English	C+	C+
Honors Geometry (*)	B	A-	Honors Pre-Calculus (*)	A	A-
Spanish 1	B	B	Spanish 2	B	B
Honors Biology (*)	B	B	Honors Chemistry (*)	A	A
Global Perspectives	B	B	European History	B+	B-
			SS HON Algebra 2 (*)	A	A
9th Grade GPA - Weighted	3.20	3.60	10th Grade GPA - Weighted	3.83	3.83
9th Grade GPA - Unweighted	2.80	3.20	10th Grade GPA - Unweighted	3.33	3.33
Grade 11 (2014-2015)	Fall	Spring	Grade 12 (2015-2015)	Fall	Spring
Junior English	C-	C	Senior English	B-	
AP Calculus BC (*)	A	A	AP Physics C: Mechanics (*)	A	
Spanish 3	B-	B-	US Government/Economics	B-	
AP Environmental Science (*)	A	A	AP Computer Science (*)	A	
US History	B-	B-	Robotics 2	A	
SS AP Calculus AB (*)	A	A	UCI - Math 3E M.Var. Calculus	A	
11th Grade GPA - Weighted	3.83	3.83	12th Grade GPA - Weighted	4.00	
11th Grade GPA - Unweighted	3.33	3.33	12th Grade GPA - Unweighted	3.60	

Cumulative GPA - Weighted (*) 3.74

Cumulative GPA - Unweighted 3.28

This transcript is unofficial unless embossed with the school seal. All letter grades on this transcript, except Physical Education, are used in the calculation of the unweighted GPA. The weighted GPA is calculated by adding one point for AP and Honors courses which are marked with an asterisk (*). Courses taken at a college are not included in the calculation of the GPA.

HENRY ISAO WATANABE

WRITING

Personal Essay

Describe a problem you've solved or a problem you'd like to solve. It can be an intellectual challenge, a research query, an ethical dilemma—anything that is of personal importance, no matter the scale. Explain its significance to you and what steps you took or could be taken to identify a solution.

Growing up, my idols were C-3PO and R2-D2 from Star Wars and Data from Star Trek. To this day I think it is only a matter of time before our technology catches up with our vision of the future.

For me this vision is more than sassy sidekicks or androids – it is much more personal. My grandmother speaks very little English, lives with my family and me, and has Alzheimer's disease. Like many people afflicted with Alzheimer's disease, she has problems communicating and has experienced memory loss, among other difficulties. But these two problems are two that I feel technology could help remedy.

With my grandmother in mind, I taught myself Xcode in order to write an application for an iPad. The application I wrote is called "Alz-Help" and I hope to one day have it available on the App Store. Short of implanting computer chips in my grandmother's brain to compensate for damaged or once-healthy neurons, this application like a logical first step.

I spent hours with my grandmother watching her and making notes about those tasks which had become difficult. One of the problems I noticed was that she was not able to communicate clearly. I designed Alz-Help with voice recognition software – in Japanese! All she had to do was say something into the Alz-Help and it would "understand" what she was saying and it would "translate" into complete English or Japanese sentences. There was a long learning curve for the software to "learn" what her intended sentence was. But as time went on, the error rate fell. Also, as Alz-Help learned how to interpret her speech, it created icons on the screen representing various phrases. So on those days when she had great difficulty speaking, all she had to do was click on the icon for her "words" to be played through the external speakers.

Using Alz-Help seemed to decrease my grandmother's frustration level. So, I went to the local senior center to see if the program could be modified to help others with similar difficulties. Needless to say that while there were many other individuals who could benefit from using the program, programming the speech recognition proved to be more difficult than I had expected. Because my grandmother had lived with us for long, I almost didn't need Alz-Help to understand her – I sort of understood through a combination of sounds that she made, gestures and she made, and the context of the situation. This was not as easy with the others at the senior center because I often had no clue what they were trying to say and I did not know them well enough to understand their gestures.

The process to perfect Alz-Help was long and a few times heartbreaking as a few of the seniors died before I was able to get Alz-Help to completely understand what they were trying to say. Because of my lack of experience and understanding of voice recognition software, my attempts – while impressive to the novice – were fairly basic. By majoring in computer engineering or computer software, I hope to made grade strides in speech recognition and apply my successes to solving basic problems like communication for those impaired by Alzheimer's disease.

One day, in the not so distant future, I hope a young dreamer will see my 10th generation Alz-Help and be inspired as I was by C-3PO, R2-D2, and Data.

HENRY ISAO WATANABE

PLYMOUTH SHORES UNIVERSITY – GENERAL SUPPLEMENT

GENERAL

Preferred start term	Fall, 2016		
Admission Plan	Regular Decision		
Financial Aid	No	Merit Scholarship	Yes
Art Supplement	No		

ACADEMICS

1st Choice Major	Computer Engineering
2nd Choice Major	Computer Science

CONTACTS

Contact 1	Campus tour
Contact 3	College Fair at Anaheim Convention Center

FAMILY

Sibling Applied	No	Relative(s) Attended	No
------------------------	----	-----------------------------	----

PLYMOUTH SHORES UNIVERSITY – ADDITIONAL INFORMATION

Required explanation – School Discipline

I was placed on academic probation the first semester of my 11th grade and my final grade was lowered one full grade. I plagiarized – sort of. I used Wikipedia as a resource for a research paper I was working on for my 11th grade US History class. I realize now that I used too much of the original text in my paper and should have at the very least quoted the source. The teacher felt, and I agree, that my paper included text that was plagiarized. I was required to re-write the paper and was automatically given a lower grade for the paper. Of course I was completely embarrassed and have since used an on-line plagiarism checker. It has actually helped me to become a better writer.

PLYMOUTH SHORES UNIVERSITY – ADDITIONAL INFORMATION

You are probably wondering about my name. Both of my parents agreed that if they had a son, my dad would have naming rights, and if they had a girl, then my mom would have naming rights. My dad won when I was born. Well, my dad is a HUGE baseball fan. So, my first name is from Hank Aaron – that's where the "Henry" comes from but like Mr. Aaron, I go by "Hank." My middle name is from Isao Harimoto who is arguably the greatest hitter in Japanese baseball history. The fact that my name represents both my Japanese and American heritage means everything to me. Of course, both of my namesakes are baseball legends which puts a little bit of pressure on me to also become legendary. But I am motivated by this. And what's funny is that I am terrible at playing baseball. -- Now my mom is a HUGE ice skating fan and my sister got "stuck" with Dorothy (Hamill) Midori (Ito) Watanabe. I'm so glad my dad won.

HENRY ISAO WATANABE

PLYMOUTH SHORES UNIVERSITY – WRITING SUPPLEMENT

Why are you a fit for Plymouth Shores?

I had two requirements as I built my college list – an exceptional Computer Science/Computer Engineering department and an organized community service outreach with the elderly. I was very pleased that Plymouth Shores had both.

Dr. Dennis Kibbler's research in biomedical computer including computation biology and medical informatics at Plymouth Shores excited me beyond belief. My grandmother has Alzheimer's. And while a cure may not be discovered in her lifetime, I am encouraged by the possibilities that Dr. Kibbler's research may yield in helping to find a cure. I want to be a part of the solution!

I have also visited Plymouth Shores so I don't have to imagine what it feels like on campus – I was there. The sense of pride that the students felt in their campus, the excitement the professors showed when they interacted with students in class and in their casual conversations, and the food ALL made me feel like I had found my next home.

HENRY ISAO WATANABE

Secondary School Report (SSR) – Part 1

School Galileo Academy, Irvine, CA

Guided by educators and industry, Galileo is an independent charter school that features performance based learning assessment, internships, and group learning. Total enrollment is 2,351 students with 544 seniors. Approximately 95% of the graduating seniors attend a four year college and 5% attend a two year college.

School AP Policy

Curriculum offered: Advanced Placement classes are offered in English, mathematics, Spanish, Computer Science, US History, and Laboratory Science. Students are encouraged to take dual-enrollment college-level coursework if they have exhausted the AP offerings in a particular subject.

Counselor Details

Name, e-mail, phone David Walker dewalker@galileo.academy.org, (949) 555-1963

Written Evaluation

Relationship to applicant College Counselor/Academic Advisor for four years
Descriptors Brilliant, nerdy, honest, quiet
Any school discipline or Criminal history Yes – See teacher’s letter of recommendation

Rank, GPA, and strength of curriculum for Henry Isao Watanabe

Rank: we do not Rank

GPA

Unweighted: 3.38

Weighted: 3.88

Curriculum Rigor:

Very Demanding

Demanding

Average

Less Demanding

Please rate the applicant – Henry Isao Watanabe – in the following areas:

	No Basis	Below Average	Average	Good (above average)	Very Good (well above average)	Excellent (top 10%)	Outstanding (top 5%)	Top Few (top 1%)
Academic Achievement					X			
Extracurricular Accomplishments				X				
Personal qualities and character					X			
OVERALL					X			

HENRY ISAO WATANABE

Secondary School Report – Part 2

Letter of Recommendation

Dear Admissions Officer,

Henry (Hank) Watanabe is a hard working student who takes pride in the fact that he has been a successful student. He is currently a senior in good standing at Galileo Academy, a highly academic college preparatory Charter School with a focus on math and science and with demanding teachers and an unusually rigorous curriculum. He has earned a solid weighted overall academic GPA (grades 9-12) of **3.74**. Hank's SAT score is **(Critical Reading 530 and Mathematics 800)** and **perfect 800s** on the Math Level 1 and Math Level 2 SAT Subject Exams. Hank has challenged himself by taking every Honors and AP classes offered in Mathematics offer by Galileo. He is now taking math coursework at the University of California, Irvine. I'd like to highlight the upward trend in Hank's GPA from a 3.4 to a 4.0 now. Matthew attributes this increase to learning how to balance his commitment to the Computer and Robotics clubs and his schoolwork and becoming a more diligent student.

Outside of the classroom, computer programming is Hank's life. This past summer, on his own, he combined his passion for computer programming with his commitment to the care of the elderly. He designed and wrote a user-friendly interface for the Apple iPad to assist the elderly in using the iPad. He donated the program to the local senior center. His grandmother lives with his family and I am sure she was part of his inspiration.

Last year, Hank decided that he wanted to get exposure to the working world. So he got an internship over the summer at a local aerospace company in their IT Department. This experience only strengthened his desire to be a computer engineer.

I would be remiss if I did not mention Hank's in-school suspension the first semester of his junior year. His teacher will explain the circumstances in greater detail. Galileo Academy has an extremely rigid academic policy. Hank went before the academic honor council (made up of his peers and our Head of Faculty) for violating our policy regarding plagiarism. Hank is becoming a better writer and I personally believe that his passion and commitment to math left little time for anything to do with writing. So, he used Wikipedia as a resource a little too liberally. As a result, Hank was required to re-write his paper and also received a grade demerit. This is the only instance where his work has been in question.

Hank is a responsible, dedicated, and often quiet young man who is willing to put in the work to reach his goals. I might also add that his brilliance in mathematics is dazzling. It is my pleasure to recommend him for admission to your university.

Best regards,

David Walker, M.A. Ed., PPS

(949) 555-1963

HENRY ISAO WATANABE

TEACHER - Letter of Recommendation

RECOMMENDATION FOR: **HENRY ISAO WATANABE**

I am writing to express my strongest support for the candidacy of Henry (Hank) Watanabe. He is one of the most talented young students I have ever had the privilege of teaching and I urge you to favorably review his application.

Hank is a gracious and unassuming young man. The breadth of his character, coupled with his heart-felt sense of humanity, distinguishes Hank amongst all of the students I have worked with during three decades as an educator.

Henry is a young man of incredible intellect. He has an innate curiosity and zeal for learning. I taught Hank Honors Geometry, AP Calculus AB, and AP Calculus BC. His intuitive understanding of mathematics is impressive. Other than his freshman year, he has never missed a single problem on any exam I gave. I always count on him to help tutor others in the class who were having difficulty in understanding the material. His devotion to not just learning the material but thoroughly understanding the material is impressive. Hank was a pleasure to teach an enormous asset to my class. He is clearly a young man of exceptionally high aptitude and is willing to work hard to study beyond the standard course material and to make lasting contributions in the classroom. He has already exhausted every advanced math course offered at Galileo Academy. He is currently enrolled in advanced math classes at the University of California, Irvine in a dual enrollment program. His professor is a colleague of mine and he reports that Hank is having a similar impact in the Math Department at UCI as he has had here.

You most likely have read of Hank's academic suspension during his junior year. Hank's academic integrity has never been in question in any of my classes. In fact, he discovered that I had the wrong answer on a mid-term exam. And instead of bringing it to my attention in front of his classmates, he spoke to me privately after class.

In summation, I give Hank Watanabe my highest possible recommendation. His talents in mathematics are exceptional and his dedication is without parallel. He is also a genuinely nice young man. I firmly believe he will be a successful adult. He has a sense of compassion that I have not seen in others his age. I am quite certain that if accepted to your institution, he will make a positive and lasting contribution.

Respectfully,

Dr. Marie Schreibman

Chair, Math Department