**HAKAN S. ALPAY**

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**WORK EXPERIENCE**

**Southern California Academy of Sciences Research Training Program May 2016**

Conducting research to determine the differences in aerodynamics between large scale and small scale wind turbines. Monitored by mentor from UCLA Geography Department. Will prepare scientific paper and presentation for professional science conference. (in progress)

**Intern, TY Engineering and Design June 2014**

Completed revised floorplans to meet dimensions of house and follow layer conventions.

**VOLUNTEER EXPERIENCE**

**ONEgeneration Adult Daycare and Childcare (Non Profit) Summer 2015**

Supervised children and helping teachers in child care, and serving meals and conducting activities in adult care.

**Adrin Nazarian for State Assembly October 2014**

Operated phone bank and participated in Get Out The Vote door-to-door canvassing.

**EDUCATION**

**North Hollywood High School, Highly Gifted Magnet**

Graduation date: May 2017 (expected)

G.P.A. 3.964 (unweighted)

**Biotechnology Summer Student Initiative, Fullerton College June 2015**

Attended a course conducting lab experiments. Practiced techniques involved in creating medicines such as DNA agarose gel electrophoresis, genetic engineering and protein purification.

**ACCOMPLISHMENTS**

* Second Place, Robot Arm Event, Polytechnic Science Olympiad Invitational Tournament 2017
* First Place, Wind Power Event, Polytechnic Science Olympiad Invitational Tournament 2017
* Second Place, Robotic Arm Event, Southern California State Science Olympiad Tournament 2016
* Second Place, GeoLogic Mapping Event, Los Angeles Science Olympiad Regional Tournament 2016
* Third Place, Wind Power Event, Los Angeles Science Olympiad Regional Tournament 2016
* Third Place, Robotic Arm Event, Los Angeles Science Olympiad Regional Tournament 2016
* Third Place, Wind Power Event, Troy Science Olympiad Invitational Tournament 2016
* First Place, Robotic Arm Event, Polytechnic Science Olympiad Invitational Tournament 2016
* Third Place, Wind Power Event, Polytechnic Science Olympiad Invitational Tournament 2016
* Third Place Winner, Applied Engineering, Los Angeles County Science Fair, March 2013
* Fourth Place Winner, Product Science (Physical), California State Science Fair, April 2013
* SAT Scores: Reading 750, Math 800, Writing 740, November 2015

**MEMBERSHIPS**

* Assistant Editor-in-Chief, The Magnitude, NHHS HGM Newsletter, September 2013 – Present
* Online Manager, Outspoken Club, NHHS HGM, August 2015 - Present
* Team Member, Science Olympiad, NHHS HGM, September 2014 – Present
* Member, Math Club, NHHS HGM, September 2013 – Present
* Secretary, American Red Cross Club, NHHS HGM, January– June 2015
* Member, Bridge Club, NHHS HGM, January – June 2015
* Member of Mu Alpha Theta (Honor Society), September 2015 – Present

**SKILLS**

* **Computer Programming:** C# and JavaScript3DS Max, Blender, Maya, Arduino, Autodesk 3DS Max
* **Game Design:** Unity Game Engine, MonoDevelop IDE, Eclipse IDE, Visual Studio IDE, Atom, Node.js
* **Drafting**: AutoCAD, Rhino
* **Microsoft Office:** Word, Excel, Publisher, PowerPoints, OneNote
* **Team Composition:** Leadership, Understanding, Teaching
* **Programming Languages:** C#, JavaScript, Java, SQL, C++
* **Design Humanities:** (Computational) Linguistics, Illustration, Graphic Design (GIMP, Inkscape, Photoshop, Illustrator), Web Design, Cinematography (Premiere Pro), Motion Design (Aftereffects)

**LANGUAGES**

* **English** (Full proficiency)
* **Turkish** (Elementary proficiency, Native language)
* **Spanish (Hispanic American)** (Limited working proficiency)
* **Japanese** (Elementary proficiency)

**PROJECTS**

**“Bokeh Bot” Twitterbot December 2016**

A bot that randomly generates an image containing bokeh (colored circles that appear in around light sources in out-of-focus areas of a photograph) and posts it to Twitter along with a randomly generated name.

Node.js, Heroku, and Processing were used for this project.

**Science Olympiad Wind Power Turbine August 2016 - Present**

Constructed a blade assembly within the guidelines of the Science Olympiad event “Wind Power.” The blade assembly is optimized to produce maximum power with minimal weight and moment of inertia. A 3D printer and CAD software such as AutoCAD and Rhino were used to print the blades for this project, but constructed the assemblies and generator from CDs, PVC piping, a motor, and wire.

**“Akrobat” Video Game November 2016**

Created a first person wave defense shooter in one month for the 2016 National STEM Video Game Challenge. The player employs a variety of weapons to survive as long as possible in a closed arena as progressively difficult enemies are spawned at the extents. The game employed a colorful, bright aesthetic with a number of movement options including wall-running to create a punchy experience. The Unity Game Engine, and Microsoft Visual Studio were used for this project.

**“The Magnitude” Student-Run Literary Magazine Website March 2016 - Present**

Designed a website for the Highly Gifted Magnet’s literary magazine “The Magnitude” as Online Editor (promoted from Nonfiction editor). Showcases submissions from each publication since the website’s inception in a lucid and comfortable format. themagnitude.weebly.com

**“Kimeiga” Portfolio Website May 2015 – Present**

Designed a portfolio website that showcases many video games, videos, languages, logos, brandings, AI bots, and other projects that I have created throughout my design career. The website aims to combine interesting works with bright colors and clean design to create a wholesome view of myself and what I can create. kimei.ga