

Julian Vallyeason

69 Brown Street., Mail # 4957 Providence, RI 02912
julian_vallyeason@brown.edu ■ (571)-296-5740 ■ www.vallyeason.com
LinkedIn: <https://www.linkedin.com/in/julian-vallyeason-b57446129>
AngelList: <https://angel.co/julian-vallyeason>

EDUCATION

Brown University

Sc. B in Chemical Engineering and Applied Math-Economics
Providence, RI 2016-2020 GPA: 4.0 (out of 4.0)

Coursework: Differential Equations, Thermodynamics, Real Analysis,
Organic Chemistry, Electrodynamics, Materials Science, Statistics

Thomas Jefferson High School for Science and Technology

Alexandria, VA 2013-2016 SAT: 2400 ACT: 36 GPA: 4.53

EXPERIENCE

Co-Founder and Product Engineer, Cloud Agronomics

(www.cloudagronomics.com)

Providence, RI Fall 2016 – Present

- Founded a solar-powered UAV startup to provide land imaging services for farmers to improve crop yield.
- Raised over **\$15,000** in UAV financing: Social Innovation Grant, Penn Aerospace Finalist (3rd), Startup Storm (2nd), HCRI Microgrant, Princeton Envision Finalist, **Hult Prize at Brown (1st)**
- Designed CAD splines for airfoil testing in SolidWorks and researched molecular-sensing imaging technology at the Kellner Lab at the Institute for Environment and Society (IBES).

Data Analytics Intern, World Resources Institute

Washington DC Summer 2017

- Developed text analysis tools using Google Jigsaw and social media APIs to map sentiment toward forest restoration
- Interviewed members of the Global Restoration Council and FAO

Co-Founder and Lead SAT Instructor, Perfect SAT-ACT Tutoring

(www.perfectsatact.com)

Global Summer 2016 – Summer 2017

- Lead online SAT tutoring sessions and built 12-course curriculum.

Political Affairs Intern, US-ASIA Institute

Washington DC Winter 2017

- Represented USAI at conferences and congressional hearings.
- Corresponded with legislative staff and organized delegations to Asia

ACADEMIC RESEARCH AND AWARDS

Goldman Sachs Data Visualization – 2nd Place, HackMIT

Cambridge, MA Sep. 2017

- Developed corporate news, stock trading, and econometric visualizations in real time (<https://newsmap2017.herokuapp.com/>)

Research Intern, JUMP Lab – Founder, VoltWorks

Alexandria, VA Fall 2014 – Spring 2017

- Developed mathematical model to stabilize fuel cell power under abiotic stress with different substrates

Awards: Virginia State Science Fair 1st Place (2015), Genius Olympiad International Finalist (2015), tJSTAR (2016), Princeton Envision Entrepreneurship Finalist (2016), Tiger Launch Regional Finalist (2017)

Neuroscience Researcher, University of Maryland (Herberholz)

College Park, MD June 2015 – February 2016

Conducted research on the role of sensory signals in crayfish dominance hierarchies; Wrote paper on highlighting connection to behavioral disorders – awaiting publication

Awards: US Public Health Service Distinguished Project Award (2016), Virginia Tech National Capital Region Best Project (2016), Human Factors and Ergonomics Society 2nd Place Award (2016)

COMMUNITY SERVICE AND OUTREACH

Cofounder and Outreach Manager, STEMWISE (501c3 nonprofit)

Greater Washington Area Fall 2014 – Summer 2016

- Founded a nonprofit STEM tutoring organization in community centers across the Washington DC area; recruited 10 members
- Actively tutored in 3 community centers for over 2 years.

Clients: Schools and Community Centers in Fairfax, Loudon, and Arlington, Muslim-American Center

Volunteer Instructor, Montfort Youth Center

Malacca, Malaysia Summer 2014

- Taught English at a nonprofit institution focused on giving underprivileged students across Malaysia access to an education

SKILLS, ACTIVITIES AND INTERESTS

Languages: English (fluent), French (fluent), Mandarin (working)

Software: Microsoft Office, Adobe Photoshop, Adobe Premiere Pro, Autodesk Inventor, Autodesk Eagle, SolidWorks, Bloomberg (BESS Certification), Wolfram Mathematica,

Programming: MATLAB (advanced), Python (proficient), Java (proficient), HTML5/CSS (proficient), Javascript (working)

Music: Royal Conservatory of Music Piano Performance Level 10 (First Class Honors), Music Theory – Harmony (First Class Honors)

University Organizations and Activities:

Power Team Lead, Brown Satellite Team

Designed PCB boards with solar cells. Conducted LiFePO4 heat and vacuum testing. Developed conformal silica gel coating procedure.

Community Organizer, Hack@Brown

Engaged in sponsor outreach to Google, pMD, and Facebook. Managed hardware inventory operations and developed judging criteria.

ENGN 0040 Lab TA, Brown Department of Engineering

Designed 4 core laboratory experiments over the semester and held open TA hours to assist students in engineering labs.

MATH 0090 Grader, Brown Department of Mathematics

Organized group tutoring sessions for students in single-variable calculus and graded weekly assignments and exams.

Invited Conferences and Programs: Startup@Brown (2017), BWxD (2017), ICTforAg (2017), Next Gen Summit (2017), Innovation Dojo (2017), Ivy League Policy Summit (2017), CCG Conference (2017), Princeton Envision (2016)

SELECTED PROJECTS

(available through Github: <http://www.github.com/jvallyea>)

Louis – A Portable Braille Reader

Dec 2017

Designed a 3D-printed dynamic braille device integrated with a Raspberry Pi

NewsMap – Visualizing Tomorrow's News

Sept 2017

Won 2nd place at HackMIT and received Brown CS recognition
Designed using Python, HTML5/CSS (Flask) and the MapBox API

Quadcopter Obstacle Course – Class Project

May 2017

[goo.gl/jyDyCW]