JULIAN VALLYEASON

INFORMATION

Project Portfolio
www.vallyeason.com/Projects

LinkedIn
www.linkedin.com/in/julian-vallyeason

GitHub
www.github.com/jvallyea

SKILLS

Languages:

English (fluent)
French (fluent)
Mandarin (working)

Software:

Microsoft Office, Adobe Photoshop, Adobe Premiere, Autodesk Inventor, SolidWorks, EAGLE, Bloomberg (BESS), Mathematica

Programming:

MATLAB (proficient)
Python (proficient)
Java (proficient)
HTML5 / CSS / JavaScript (proficient)

Music:

Royal Conservatory of Music Piano Performance Level 10 (First Class Honors)

STUDENT 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 (patent pending).

Lab TA, **Brown Dept. of Engineering**
Designed 4 core labs for ENGN 0040: Dynamics, and held open TA hours to assist students.

Grader, **Brown Dept. of Mathematics**
Graded weekly assignments and exams

SELECTED PROJECTS

Louis – A Portable Braille Reader
Designed a 3D-printed dynamic braille device integrated with a Raspberry Pi and PiCam

NewsMap – Visualizing Global Headlines
Designed using Python, HTML/CSS, and MapBox

Quadcopter Obstacle Course
Developed visual recognition and flight system for Crazyflie Nano Quadcopters.
Please visit [goo.gl/jyDyCW]

EDUCATION

Brown University – *BS Applied Math – Economics and Engineering (Chemical)*
Providence, RI 2016-2020 **GPA: 4.0 (out of 4.0)**
Coursework: Differential Equations, Thermodynamics, Real Analysis, Econometrics, Statistics

Thomas Jefferson High School for Science and Technology
Alexandria, VA 2013-2016 **SAT: 2400** **ACT: 36** **GPA: 4.53**

WORK EXPERIENCE

■ *Cofounder and Engineer,* **Cloud Agronomics** Providence, RI | Fall 2016 – Present
(https://www.cloudagronomics.com)
- Founded a solar-powered UAV startup to provide imaging services to farmers to improve crop yield
- Designed CAD splines for airfoil testing in SolidWorks and researched molecular-sensing imaging technology at the Kellner Lab at the Brown Institute for Environment and Society (IBES)

Distinctions: Raised over **$15,000** in UAV financing:
Social Innovation Grant, Penn Aerospace Finalist (3rd), Startup Storm (2nd), HCRI Microgrant, Princeton Envision Entrepreneurship Finalist, **Hult at Brown (1st)**, MIT Agribusiness Finalist, Tigerlaunch Finalist

■ *Data Analytics Intern,* **World Resources Institute** Washington DC | Summer 2017
- Developed text analysis tools using Google Jigsaw and social media API's to map sentiment
- Interviewed the Global Restoration Council and UN Food & Agriculture Organization (FAO)

■ *Lead SAT Instructor,* **Perfect SAT-ACT Tutoring** Global | Summer 2016 – June 2017
(https://www.perfectsatact.com)
- Lead weekly SAT tutoring sessions through WebEx using self-developed preparation materials

■ *Political Affairs Intern,* **US-Asia Institute** Washington DC | Winter 2017
- Represented the institute at conferences (AEI, Carnegie Endowment) and congressional hearings
- Corresponded in congressional confirmation hearings and organized delegations to Asia

ACADEMIC RESEARCH AND AWARDS

■ *Goldman Sachs Data Visualization (2nd Place)*, **HackMIT** Cambridge, MA | Sep' 2017
(https://newsmap2017.herokuapp.com)
- Developed corporate news, stock trading, and econometric visualizations in real time

■ *Research Intern,* **JUMP Lab** – *Founder,* **VoltWorks** Alexandria, VA | Fall '14 – Spring '17
- Developed mathematical model to stabilize power under abiotic stress with different substrates

Awards: Virginia State Science and Engineering Fair (1st – 2015), Genius Olympiad Finalist (2015, tjSTAR (2016), Princeton Envision Entrepreneurship Finalist (2nd - 2016), Tiger Launch Regional Finalist (2017)

■ *Researcher,* **Univ. of Maryland (Herberholz Lab)** College Park MD | June '15 – Feb '16
- Conducted research on the role of sensory signals in crayfish dominance hierarchies
- Developed MATLAB script to automate video analysis of crayfish agonistic interactions

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

■ *Community Organizer,* **Hack@Brown** Providence, RI | Sep '17 - Present
- Organized hackathon food orders and developed judging criteria for prize distribution

■ *Volunteer Instructor*, **Montfort Youth Center** Malacca, Malaysia | Summer 2014
- Taught English at a nonprofit institution focused on giving underprivileged students across Malaysia access to a technical education

INVITED CONFERENCES AND PROGRAMS

Early Engagement Program, **AQR (Applied Quantitative Research)**
Jan. 2018 – Invited to explore quantitative finance research opportunities through a hedge fund

Startup@Brown, **Brown Entrepreneurship Program**
Sep. 2017 – Invited to present UAV research and entrepreneurial journey with conference attendees

Innovation Dojo, **Brown Entrepreneurship Program**
Spring 2017 – A semester-long workshop to develop a venture, culminating with a final presentation

Ivy League Policy Summit, **Ivy Council**
March 2017 – Invited to develop mental health policy recommendations across Ivy League schools.