

Julian Vallyeason

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EDUCATION

Brown University

Providence, RI Class of 2020

GPA: 4.0 (out of 4.0) Concentration: Sc.B Chemical Engineering, Applied Mathematics-Economics

Relevant Coursework: Differential Equations, Electrodynamics, Organic Chemistry, Materials Science, Statistical Inference

Thomas Jefferson High School for Science and Technology

Alexandria, VA 2013-2016

GPA: 4.53 (4.0 scale weighted), SAT: 2400; ACT: 36;

EXPERIENCE

Cloud Agronomics, *Cofounder and Product Engineer* (www.cloudagronomics.com)

Rhode Island, Sep 2016 - Present

- Founded solar-powered UAV startup that leverages proprietary imaging technology to provide aerial data acquisition services
- Managed UAV financing and development; Recipient of Brown's Social Innovation Explore Grant; Penn Aerospace Finalist

World Resources Institute, *Data Analytics and Movement Building Intern*

Washington DC, Summer 2017

- Developed analysis tools using Google Jigsaw and social media APIs to engineer a data-driven strategy for forest restoration
- Conducted interviews with leading forestry and agriculture experts and activists

Perfect SAT-ACT Tutoring, *Cofounder, Lead SAT Instructor* (<http://www.perfectsatact.com/>)

Aug 2015 – June 2017

- Lead bi-weekly SAT tutoring sessions with 5 students and constructed 12-course curriculum outline for SAT preparation

US-Asia Institute, *Political Affairs Intern*

Washington DC, Winter 2017

- Represented USAI at briefings and congressional hearings; corresponded with legislative staff and delegations to Asia

ACADEMIC RESEARCH AND AWARDS

HackMIT (Goldman Sachs Data Visualization – 2nd Place)

Cambridge Massachusetts, Sep 2017

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

JUMP Lab Microbial Fuel Cell Engineering, *Project Manager*

Alexandria VA, Sep 2014 – June 2016

- Developed a mathematical model to optimize current and voltage output under different substrates
- Virginia State Science and Engineering Fair 1st Place Award (2015); Genius Olympiad Research International Finalist (2015)
- Princeton Envision Entrepreneurship Finalist (2nd Place); TigerLaunch Regional Finalist; Raised over \$5000 in seed funding

UMD (Herberholz Lab) Neuroscience Research, *Research Intern*

College Park MD, June 2015 – Feb 2016

- Studied and automated crayfish interactions using MATLAB to measure changes in aggression following sensory stimulation
- US Public Health Service Distinguished Project Award (2016); Virginia Tech National Capital Region Best Project (2016)

COMMUNITY SERVICE AND OUTREACH

Hack@Brown, *Community Organizer (Experience Team)*

Rhode Island, Sep 2017 - Present

- Engaged in sponsor outreach, logistics (food, swag, venue), and inventory operations

Montfort Youth Center (Malaysia), *Volunteer Instructor*

Malacca Malaysia, Summer 2014

- Taught mathematics and English at a nonprofit institution focused on giving underprivileged students across Malaysia access to a technical education; oversaw community and outreach events

ACTIVITIES, SKILL SETS & INTERESTS

Languages: English (native), French (Professional), Mandarin (Limited Working Proficiency)

Computer: Microsoft Office, Adobe Photoshop / Illustrator, Autodesk Eagle, SolidWorks, Bloomberg (BESS), Wolfram Mathematica

Technology: Java, MATLAB, Python, HTML5 / CSS, Javascript

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

University Student Organizations and Jobs:

Power Systems: Battery and CAD Research Lead, Brown Satellite Team

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

Business Associate, Brown Journal of World Affairs

Managed and produced website content for outreach and information dissemination. Responsible for the journal's administrative liaisons

Marketing Associate, IvyInspire and Ivy Council (Inter-Ivy Initiative)

Developed campus outreach strategies, and prepared sections of IvyInspire's weekly newsletter to encourage Ivy Council involvement

Math 0090 (Calculus) Teachers Assistant (TA) and Grader

Organized group tutoring sessions for students in Single-Variable Calculus and graded weekly assignments and exams