J. BLAKE BULLWINKEL

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EDUCATION

Harvard University, Cambridge, MA

Expected June 2022

M.S. in Data Science

Relevant coursework: Data Science I, Artificial Intelligence, Systems Development, Environmental Modeling.

Williams College, Williamstown, MA

June 2020

B.A. in Mathematics and Chinese. GPA 3.83/4.0 (cum laude)

University of Oxford, Oxford, UK

June 2019

Attended as a visiting student as part of the selective, year-long Williams-Exeter Program at Oxford.

UWCSEA (East Campus), Singapore

June 2016

IB Diploma. Highest grade (7) in HL math, physics, chemistry, Chinese. Class of '16 Graduation Student Speaker.

PROFESSIONAL EXPERIENCE

Marble, remote, Co-Founder

Summer 2020 to Present

- Designed and developed a React Native eco-social app that uses phone sensor API data to estimate carbon footprint from travel, allowing users to offset emissions and share their progress with friends.
- Leading a team of 3 to launch app on the App Store/Google Play and maintaining a public release website.

Institute for Human and Machine Cognition, Pensacola, FL, Data Science Intern

Jan 2020

- · Used Python and PostgreSQL for cleaning, management and visualization of flight simulation data.
- Used hypothesis testing to justify correlations between physiological indicators in pilots and flight performance.

Zola Electric, Amsterdam, Netherlands, Digital Platforms Intern

Summer 2019

- Conducted software and sales model market research and presented novel findings to a global team of engineers and product managers aimed at providing more competitive solar energy access solutions to sub-Saharan Africa.
- Used MySQL to query time series data and identify transaction delays within Zola's software platform.

Bill & Melinda Gates Foundation, Beijing, China, Policy Intern

Summer 20

• Prepared research reports in Chinese on scaling development-related best practices from China across Africa.

TECHNICAL PROJECTS

Modeling Electricity Consumption in the US, Williamstown, MA

May 2020

• Used MLR in R to predict household electricity consumption in the US from various residential characteristics.

Early Epidemiological Model Parameters for COVID-19, Williamstown, MA

February 2020

- Used Python to model early-stage COVID-19 case data in mainland China using a system of ODEs.
- "Optimize Your 32" Course Selection Tool, Williamstown, MA

Nov 2019

• Used Google's OR-Tools Python package to solve course selection at Williams as a linear programming problem.

LEADERSHIP EXPERIENCE

Exeter College Boat Club, Oxford, UK, Men's Captain

Nov 2018 to June 2019

- Elected to lead the Exeter College Boat Club as the men's rowing captain during year abroad at Oxford.
- · Hosted meetings with the executive committee and worked with coaches to organize training and crew selection.

Williams College, Williamstown, MA, Chinese Teaching Assistant

Sept 2017 to May 2020

• Selected by Chinese department to act as a salaried assistant to professors through 1:1 tutoring sessions.

HONORS AND AWARDS

Goldberg Prize in Mathematics for the best mathematics colloquium (department-wide senior prize)	2020
Linen Prize in Chinese for achieving distinction in Chinese (department-wide senior prize)	2020
Carolyn Korthals Altes Scholarship for academics and potential to contribute to society	2019
Williams College Alumni Sponsored Internship (ASIP) Grant	2019
Putnam Competition (ranked 627/4,229 among undergrads specializing in mathematics)	2019

SKILLS AND INTERESTS

Language Chinese (Mandarin); Python (SciPy, scikit-learn), R, SQL, Javascript, React Native, HTML/CSS. Rowing, Writing (Medium blog), Rubik's Cube Solving (WCA profile).