

## EDUCATION

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**Brown University** Providence, RI  
*Bachelor of Science in Cognitive Neuroscience, Computational Track*  
*Honors, Nominated to Sigma Xi (Scientific Research Honor Society)*  
Courses: Software Engineering, Functional Programming, Data Fluency, Computational Cognition  
**Cumulative GPA: 3.49/4.00**  
May 2018

**Harvard Graduate School of Design** Cambridge, MA  
*Design Discovery Program in Architecture*  
Summer 2017

**Fieldston High School** June 2013

## WORK EXPERIENCE

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**Serre Lab in Computational Vision** Providence, RI  
*Research Assistant, Web Developer*  
2016-Present

- Awarded honors and *Sigma Xi Honor Society* for thesis on modeling Grid Illusions
- Modeled the visual system in the context of optical illusions, increasing relative accuracy from 75 to 80% by implementing excitation and inhibition between receptive fields in Python
- Led a redesign effort of Brown's Cognitive, Linguistic, and Psychological Sciences [website](#).

**Tradeweb Markets** Tokyo, Japan  
*Market Analyst Intern*  
Fall 2017

- Wrote Python scripts to scrape data on recent trades, increasing data collection speed 10x
- Presented weekly reports on trends in East Asian bond markets
- Updated head of East Asian Markets on cryptocurrency developments

**Zone Digital** London, England  
*Data Analytics Intern*  
Summer 2016

- Created SQL database of 500+ UK competitors, and presented weekly on insights

## SELECTED PROJECTS

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**Modeling of the Visual Stream in the Hermann Grid** — *Honors Thesis, Spring 2018*

- Improved accuracy of computational models of the visual cortex by 5%
- Proposed a new biological explanation for the illusory strength of Grid Illusions

**Stuff Goin' Down** — *Software Engineering Final Project, Spring 2018*

- Collaborated to create an interactive life map of the world's breaking news, organized by sentiment
- Create user and sentiment analyzer classes in Java, built user up/down voting functionality

**Brown University Cognitive Science Departmental Website** — *Paid Project, Fall 2018*

- Primary developer (UI, site organization, copy) for Brown's new departmental website for [Cognitive, Linguistic, and Psychological Sciences](#).
- Built on Drupal, with certain pages requiring custom HTML/CSS

## EXTRA-CURRICULAR / LEADERSHIP

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- Ultimate Frisbee A Team leadership committee — finishing 5th in nation in 2018
- Selected as a Meiklejohn Peer Advisor to advise and support incoming first-years
- Architecture & Design Teacher at the Wheeler High School

### References:

Dr. Thomas Serre , Brown University – [thomas\\_serre@brown.edu](mailto:thomas_serre@brown.edu)  
Paul Worthy Managing Director of Tradeweb Japan – [paul.worthy@tradeweb.com](mailto:paul.worthy@tradeweb.com)