

# Ellis Brown

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## EDUCATION

### VANDERBILT UNIVERSITY

Aug 2013 – May 2017 | Nashville, TN  
School of Engineering

**B.S. COMPUTER SCIENCE**

**B.A. APPLIED MATHEMATICS**

Dean's List (Spring 2014, 2016)

Cum. GPA: 3.4 / 4.0

CS GPA: 3.6 / 4.0

### SCHOLARSHIP

Osage Indian Nation

4 yr. Higher Education Tribal Scholarship

TLSAMP Research Scholar

### MARY INSTITUTE & ST. LOUIS COUNTRY DAY SCHOOL

Grad. May 2013 | Saint Louis, MO

AP Scholar with Distinction

National Merit Commended Scholar

## LINKS

LinkedIn:// [ellislbrownii](#)

GitHub:// [ellisbrown](#)

## COURSEWORK

### UNDERGRADUATE

Machine Learning

Artificial Intelligence

Web Programming

Big Data

Computer Networks

Coding Theory & Cryptography

Algorithms

Abstract Data Structures **TA & Grader** (C++)

## SKILLS

### PROGRAMMING

Languages

Python • Javascript • Typescript • Java

C++ • Lua • SQL • Bash • Git •  $\LaTeX$

Frameworks

Pytorch • Torch • SKLearn • NLTK • AWS

Angular2 • Node.js • Express.js • Spark

### LEADERSHIP

BlackRock Intern Portfolio Challenge

**Team Lead** of 10 Members (Summer 2016)

Vanderbilt Water Polo **Captain** (2015-2016)

Kappa Sigma **Social Chairman** (2014-2015)

## RESEARCH

### ARTIFICIAL INTELLIGENCE AND VISUAL ANALOGICAL SYSTEMS LAB

Researcher under Dr. Maithilee Kunda, with Dr. Adriane E. Seiffert

Jan 2017 - Present | Nashville, TN

- Researcher on NSF funded project, "A Computational Cognitive Architecture to Model Human Visual Search for Spatiotemporal Targets"
- Lead author on paper being submitted to AAAI-18 Conference Sep 2017
- Giving oral presentation at AISES National Conference Sep 2017

## PROJECTS

### OPEN SOURCE DEEP LEARNING PROJECTS

**ssd.pytorch** | March 2017 || GitHub:// [amdegroot/ssd.pytorch](#)  18  289  81

Working with Max de Groot, implemented and maintain a PyTorch version of the unified framework for real-time object detection using a single network outlined in Wei Liu's paper [arXiv:1512.02325v5]

**deepgenres.torch** | Spring 2017 || GitHub:// [amdegroot/deepgenres.torch](#)

Deep convolutional neural network for audio classification of music genres Torch, Lua

### VANDERBILT | ADVANCED COMPUTER SCIENCE COURSE PROJECTS

**Web Programming** | Full-Stack SPA Solitaire game | Fall 2016

Node, Backbone, React, AJAX, MongoDB, PUG (Jade), Underscore

**Big Data** | Market Prediction ML | Spring 2016 || GitHub:// [dcarr45/FinanceML](#)

Predicting near-term S&P 500 index trends using machine learning. Aggregated 15 years worth of NYT articles on top S&P performers and performed sentiment analyses on to see if general sentiment could predict a rise in the S&P over a month.

## EXPERIENCE

### BLACKROCK | SOFTWARE ENGINEERING ANALYST

July 2017 – Present | New York, NY

### BLACKROCK | SOFTWARE ENGINEERING INTERN

June 2016 – Aug 2016 | New York, NY

- **Full-stack developer** –Wrote Angular2 webapp for Cash Reconciliation Rule Management using TypeScript with SpringMVC Java back-end.
- **Intern Hackathon Winner** (Team of 4)–Structuring Unstructured Data at Scale PDF Parsing, NLTK NER, SKLearn Decision Tree ML prediction, Angular2 web

## AWARDS

2016 Finalist BlackRock Founder's Scholarship

2016 Finalist Google Lime Scholarship

2013 National (2X) USA Water Polo Academic All-American

## SOCIETIES

National American Indian Science and Engineering Society (AISES)

Regional Tenn. Louis Stokes Alliance for Minority Participation (TLSAMP)

National USA Water Polo Olympic Development Program