




Ellis L. Brown II*Curriculum Vitae***CONTACT
INFORMATION**

364 W. 18th St.
Apt. 2E
New York, NY 10011

 [ellisbrown](#)
 [ellislbrownii](#)
 [ellislbrownii](#)

 <http://ellisbrown.me/>
 ellis.l.brown.ii@gmail.com
 +1 (314) 761-1662

**RESEARCH
INTERESTS**

Deep Learning • Machine Learning • Artificial Intelligence • Computer Vision
Cognitive Science • Cognitive Modeling • Neuroscience

EDUCATION

Vanderbilt University, Nashville, TN
Osage Nation Higher Education Scholarship
Bachelor of Science, Computer Science
Bachelor of Arts, Mathematics

Aug. 2013 – **May 2017**

CS GPA: 3.6/4.0

PUBLICATIONS

Brown, E. L., II*, Park, S.*, Warford, N.*, Seiffert, A. E., Kawamura, K., Lappin, J. S., & Kunda, M. (2018, Feb. 1). *A Computational Cognitive Architecture to Model Human Visual Search for Spatiotemporal Targets*. Preparing for submission to CogSci-18.

*These authors contributed equally to this research

Brown, E. L., II, Seiffert, A. E., Warford, N., Park, S., & Kunda, M. (2017, Sept. 21). *Computational Cognitive Systems to Model Information Salience*. Abstract presented at the American Indian Science and Engineering Society National Conference, Denver, CO. [[link](#)]




TEACHING

Teaching Assistant and Grader, under Dr. Jerry Roth Fall 2015
Program Design & Data Structures, Vanderbilt University School of Engineering

**RESEARCH &
PROJECT
EXPERIENCE**

Artificial Intelligence and Visual Analogical Systems Lab Jan. 2017–present
Advised by Dr. Maithilee Kunda

- Proposed a computational cognitive architecture used to model and understand human visual attention in the specific context of visual search for a spatiotemporal target. "SpatioTemporal Template-based Search" (STTS)
- Lead author on final paper to be submitted **CogSci-18** Feb 2018
- Co-Lead author on initial paper submitted to **AAAI-18** Sep 2017
- Oral presentation of abstract at **AISES National Conference** Sep 2017
- Also worked alongside two graduate students to create a novel Mar 2017 image classification dataset to be used in training deep neural networks.

SSD.PyTorch | [GitHub:// amdegroot/ssd.pytorch](#)  32  526  170 Mar. 2017
PyTorch Implementation of Single Shot MultiBox Detector object detection network

- Unified framework for real-time object detection using a single network, outlined in Liu et al. 2016 [[arXiv:1512.02325v5](#)]
- Worked with fellow labmate Max de Groot to implement and maintain repository.
- Code cited numerous times: [Medium](#) • [AI GitBook](#) • [The Incredible PyTorch](#)

Name2Gender | [Blog Post](#) | [GitHub:// ellisbrown/name2gender](#) Dec. 2017
Gender Inference from Character Sequences in Multinational First Names

- Implemented Naive Bayes & Char-RNN approaches
- Wrote [blog post on Medium](#), picked up by *Towards Data Science* Publication

DeepGenres.Torch | [GitHub:// amdegroot/deepgenres.torch](#) May 2017
Deep convolutional neural network for audio classification of music genres.

SELECTED COURSEWORK	Machine Learning • Artificial Intelligence • Web-based System Architecture • Big Data Computer Networks • Coding Theory & Cryptography • Number Theory • Algorithms Probability & Statistics • Program Design & Data Structures
PROFESSIONAL EXPERIENCE	<div> <div> <i>Software Engineer</i> Jul. 2017–present </div> <div> BlackRock, Aladdin Product Group, Core Data Team – New York, NY </div> </div> <div> <div> <i>Software Engineering Intern</i> Summer 2016 </div> <div> BlackRock, Aladdin Product Group – New York, NY </div> <ul style="list-style-type: none"> • <i>Full-Stack Developer</i> – Wrote Angular2 webapp for Cash Reconciliation Rule Management using TypeScript with SpringMVC Java back-end. • <i>Intern Hackathon Winner</i> (Team of 4) – Structuring Unstructured Data at Scale PDF Parsing, NLTK Named Entity Recognition, SKLearn Decision Tree prediction, Angular2 web interface </div> <div> <div> <i>Software Engineering Intern</i> Summer 2015 </div> <div> Exegy, Real Time Market Data Solutions – Saint Louis, MO </div> <ul style="list-style-type: none"> • Overhauled Data Entitlements system with Python script to populate SQL db </div>
COMMUNITY SERVICE	<div> <div> <i>Volunteer</i>, Manna Project International, Corozal Town, Belize Mar 2016 </div> <ul style="list-style-type: none"> • Constructed a new house for Jacob's Farm, the country's only drug and alcohol rehabilitation farm in a rural village called Patchakan </div>
EXTRA-CURRICULAR ACTIVITIES	<div> <div> <i>Tour Guide</i>, Vanderbilt Admissions 2014-16 </div> </div> <div> <div> Elected <i>Captain & President</i>, Vanderbilt Water Polo Club 2014-16 </div> <ul style="list-style-type: none"> • SEC Champions, competed in CWPA National Championship 2014 </div> <div> <div> Elected <i>Social Chairman</i>, Kappa Sigma Fraternity (Kappa Chapter) 2014-16 </div> <ul style="list-style-type: none"> • Managed \$45k semi-annual budget; served on chapter's Executive Council • Selected to represent Kappa Chapter at: <div> <div>– Kappa Sigma National Leadership Conference Summer 2014</div> <div>– Vanderbilt Greek Emerging Leaders Program Fall 2014</div> </div> </div> <div> <div> USA Water Polo 2010-13 </div> <ul style="list-style-type: none"> • Junior Olympics 2012, 2013 • Olympic Development Program 2010-13 </div>
AWARDS	<div> <div>1st BlackRock NYC Intern Hackathon 2016</div> <div> <i>Finalist</i>, BlackRock Founder's Scholarship 2016 </div> <div> <i>Finalist</i>, Google Lime Scholarship 2016 </div> <div> <i>Finalist</i>, Lime Connect Fellowship 2015 </div> <div> <i>All-Conference</i>, SEC Second Team, Water Polo 2014 </div> <div> <i>Academic All-American</i>, USA Water Polo 2012, 2013 </div> </div>
SOCIETIES	<div> <div>American Indian Science and Engineering Society (AISES)</div> <div>Lime Connect Network for Students with Disabilities</div> </div>
PROGRAMMING SKILLS	<div> <div> <i>Languages</i>: Python • JavaScript • Java • MATLAB • TypeScript • C++ • Bash • \LaTeX </div> <div> <i>Frameworks</i>: PyTorch • Torch • SKLearn • NLTK • AWS • Angular2 • Node.js • git </div> </div>