# Brandon Amos

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in bdamos  •  🐦 brandondamos  •  ⌂ bamos
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## Education

| | |
|---|---|
| ○ Carnegie Mellon University, | Aug 2014 – Present |
| ○ Carnegie Mellon University, | Aug 2014 – May 2016 |
| ○ Virginia Tech, | Aug 2011 – May 2014 |
| ○ Northside High School (Roanoke, Virginia), | May 2011 |

## Research Experience

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|---|---|
| ○ Carnegie Mellon University, Zico Kolter | Apr 2016 – Present |
| ○ Machine learning and optimization | |
| ○ Intel Labs, Vladlen Koltun | June 2018 - Sept 2018 |
| ○ Machine learning | |
| ○ Google DeepMind, Nando de Freitas | May 2017 – Oct 2017 |
| ○ Machine and reinforcement learning | |
| ○ Carnegie Mellon University, Mahadev Satyanarayanan | Aug 2014 – Apr 2016 |
| ○ Applied machine learning and mobile systems | |
| ○ Virginia Tech, Jules White | May 2012 – May 2014 |
| ○ Mobile systems, cyber-physical systems, and security | |
| ○ Virginia Tech, Layne Watson | Jan 2013 – May 2014 |
| ○ Scientific computing, global/stochastic optimization, and bioinformatics | |
| ○ Virginia Tech, Binoy Ravindran | Nov 2012 – Mar 2014 |
| ○ Heterogeneous compilers | |

## Selected Publications

Google Scholar ID: d8gdZR4AAAAJ

## Teaching Experience

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|---|---|
| ○ Graduate AI (CMU 15-780), TA | S2017 |
| ○ Distributed Systems (CMU 15-440/640), TA | S2016 |
| ○ Software Design and Data Structures (VT CS 2114), TA | S2013 |

## Industry Experience

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| ○ Data Scientist Intern, Adobe Research | May 2014 – Aug 2014 |

- I built a web analytics processing engine using **Scala**, **Spark**, **Spray**, **Parquet**, and **HDFS**.

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| ○ Software Engineer Intern, Snowplow Analytics | Dec 2013 – Jan 2014 |

- Open-source **Scala** development with a startup on the Snowplow analytics platform. My commits are online at https://github.com/snowplow/snowplow/commits?author=bamos.
- Developed a new server using **Spray** and **Actors** to store **Thrift** events on **Amazon Kinesis**.

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| ○ Software Engineer Intern, Qualcomm | May 2013 – Aug 2013 |

- I created a specification format language translator for fuzz testing with Python.

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| ○ Software Engineer Intern, Phoenix Integration | May 2012 – Aug 2012 |

- I developed industry software for software integration and design process optimization in

**VC++**, **VC#**, and **Java**.
- o Network Administrator Intern, Sunapsys      Jan 2011 – Aug 2011
  - Internship in high school to replace Windows domain, mail, DHCP, and DNS servers with virtual **Linux** servers using **KVM** and **virsh**.

## CMU Graduate Coursework

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|---|---:|
| o Statistical Machine Learning (10-702, Au), L. Wasserman | S2017 |
| o Deep Reinforcement Learning (10-703, Au), R. Salakhutdinov and A. Fragkiadaki | S2017 |
| o Intermediate Statistics (10-705, Au), L. Wasserman | F2016 |
| o Topics in Deep Learning (10-807), R. Salakhutdinov | F2016 |
| o Convex Optimization (10-725), R. J. Tibshirani | F2015 |
| o Algorithms in the Real World (15-853), G. Blelloch and A. Gupta | F2015 |
| o Semantics of Programming Languages (15-812), A. Platzer | S2015 |
| o Optimizing Compilers for Modern Architecture (15-745), T. Mowry | S2015 |
| o Advanced Operating and Distributed Systems (15-712), D. Andersen | F2014 |
| o Mobile and Pervasive Computing (15-812), M. Satyanarayanan and D. Siewiorek | F2014 |

## Honors & Awards

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|---|---:|
| o NSF Graduate Research Fellowship | 2016 – 2019 |
| o 1st Place Undergraduate Senior Capstone Award, Virginia Tech Computer Science | 2014 |
| o David Heilman Research Award, Virginia Tech Computer Science | 2014 |
| o Senior Scholar Award, Virginia Tech Computer Science | 2014 |
| o Honorable Mention, CRA Outstanding Undergraduate Researcher Award | 2014 |
| o Awarded eight undergraduate merit scholarships | 2011 – 2014 |

## Skills

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| Languages | C, C++, Fortran, Haskell, Java, Lua, Make, *Mathematica*, Python, R, Scala |
| Frameworks | Akka, NumPy, Pandas, PyTorch, SciPy, TensorFlow, Torch7 |
| Systems | Linux, OSX |