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<http://bamos.github.io>

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| INTERESTS | Compiler, mobile, or security research or development in Linux . Seeking a PhD fellowship starting May 2014 or internship from May–August 2014. |
| EDUCATION | Virginia Polytechnic Institute and State University Blacksburg, Virginia <i>B.S. Computer Science, in Honors. Mathematics minor.</i> August 2011 – May 2014 • Overall GPA: 3.98/4.00 Major GPA: 4.00/4.00 • Thesis: Evaluating machine learning approaches to runtime mobile malware detection techniques. |
| RESEARCH EXPERIENCE | Virginia Tech Computer Science Department Blacksburg, Virginia <i>Undergraduate Research Assistant, Advisor - Dr. Layne Watson</i> January 2013 – Present • Optimization algorithm in Fortran 95 resulting in primary authorship on a conference publication. Systems Software Research Group Blacksburg, Virginia <i>Undergraduate Research Assistant, Advisor - Dr. Binoy Ravindran</i> November 2012 – Present • Automatic OpenMP to CUDA translation using C++ and the ROSE compiler framework. • Scala and Bash development in Linux . Magnum Research Group Blacksburg, Virginia <i>Undergraduate Research Assistant, Advisor - Dr. Jules White</i> May 2012 – Present • Android malware detection research resulting in primary authorship on a conference publication. • Created a distributed Actor system using Scala for machine learning classification of APKs. • C++ , Make , and Android source development in Linux . Qualcomm, Inc. San Diego, California <i>Source Integrity Team Software Intern</i> May 2013 – August 2013 • js , C++ , and Python development in Linux . Phoenix Integration, Inc. Blacksburg, Virginia <i>Software Engineer Intern</i> May 2012 – August 2012 • Industrial software development using VC++ , VC# , Java , Tomcat , JUnit , NUnit , Ant , and Make . Sunapsys, Inc. Vinton, Virginia <i>Network Administrator Intern</i> January 2011 – August 2011 • Linux server configuration and Bash development. |
| CONFERENCE PUBLICATIONS | • “Applying machine learning classifiers to dynamic Android malware detection at scale.” Brandon Amos , Hamilton Turner, Jules White. <i>IWCMC’13 Security, Trust, and Privacy Symposium</i> . Cagliari, Italy, July 2013. • “Fortran 95 implementation of QNSTOP for global and stochastic optimization.” Brandon Amos , David Easterling, Layne Watson, Brent Castle, Michael Trosset, William Thacker. <i>Submitted</i> . |
| SKILLS | Preferred Tools: Linux ^{***} , vim/gdb ^{***} , git ^{***} , Make ^{**} Languages: Bash ^{**} , C/C++ ^{**} , C# [*] , Fortran ^{**} , HTML/CSS [*] , L ^A T _E X ^{**} , Java ^{**} , JavaScript ^{**} , Mathematica ^{**} , PHP [*] , Python ^{***} , R [*] , Scala ^{**} |
| PROJECTS | Personal Blog and Website – http://bamos.github.io July 2012 – Present • 27 posts across the following tags, listed by highest frequency. Python, LaTeX, Bash, Scala, Linux, Android, Fortran, C++, Mathematica, CUDA GitHub Portfolio – http://github.com/bamos April 2011 – Present • Hosts code samples, original source code, and patches for open source projects. |
| HONORS & AWARDS | • Sophomore Scholar Award, Virginia Tech Computer Science, 2013 ◦ Given to the sophomore in Computer Science with the most outstanding academic record. • Intelligence Community Center of Academic Excellence Scholar, Virginia Tech, 2012–2013 ◦ Merit-based scholarship that provides a security-based research fellowship. • Engineering Scholarship, Roanoke County Public Schools Education Foundation, 2011 ◦ Merit-based scholarship presented annually to one student in the graduating Engineering class. • Pamplin Leader Scholarship, Virginia Polytechnic Institute and State University, 2011 ◦ Merit-based scholarship presented to one student from each public high school in Virginia. |