# brandon amos. rèsumè.

**Phone.** (540) 947–1238 **Email.** bdamos@vt.edu

http://bamos.github.io

| | |
|---|---|
| INTERESTS | **Compiler**, **mobile**, or **security** research in a **Linux** environment. |

**EDUCATION**

**Virginia Polytechnic Institute and State University** — Blacksburg, Virginia
*B.S. Computer Science* — **August 2011 – May 2014**
- **Overall GPA:** 3.98/4.00 — **Major GPA:** 4.00/4.00

**RESEARCH EXPERIENCE**

**Virginia Tech Computer Science Department** — Blacksburg, Virginia
*Undergraduate Research Assistant, Advisor - Dr. Layne Watson* — **January 2013 – Present**
- Implement quasi-Newton stochastic optimization algorithm in **Fortran 95**.

**Systems Software Research Group** — Blacksburg, Virginia
*Undergraduate Research Assistant, Advisor - Dr. Binoy Ravindran* — **November 2012 – Present**
- Developed an automatic **OpenMP** to **CUDA** translator in **C++** with the **ROSE** compiler framework.
- **Scala** and **Bash** development in **Linux**.

**Magnum Research Group** — Blacksburg, Virginia
*Undergraduate Research Assistant, Advisor - Dr. Jules White* — **May 2012 – Present**
- Android **malware detection research** resulting in primary authorship on a conference publication.
- Working on a distributed **Actor** system using **Scala** for **machine learning** classification of APKs.
- **C++**, **Make**, and **Android source** development in **Linux**.

**INDUSTRY EXPERIENCE**

**Qualcomm, Inc.** — San Diego, California
*Source Integrity Team Software Intern* — **May 2013 – August 2013**
- **js**, **C++**, and **Python** development in **Linux**.

**Phoenix Integration, Inc.** — Blacksburg, Virginia
*Software Engineer Intern* — **May 2012 – August 2012**
- Industrial software development using **VC++**, **VC#**, **Java**, **Tomcat**, **JUnit**, **NUnit**, **Ant**, and **Make**.

**Sunapsys, Inc.** — Vinton, Virginia
*Network Administrator Intern* — **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.
  *IWCMC'13 Security, Trust, and Privacy Symposium.* Cagliari, Italy, July 2013.

**SKILLS**
- **Preferred Tools:** Linux***, vim/gdb***, git***, Make**
- **Languages**: Bash**, C/C++**, C#*, Fortran**, HTML/CSS*, LaTeX**, Java**, JavaScript**,
  Mathematica**, PHP*, Python***, R*, Scala**

  Exposure* – Minimal knowledge** – Adequate knowledge*** – Maximum knowledge****

**PROJECTS**

**Personal Blog and Website** – http://bamos.github.io — **July 2012 – Present**
- Hosted on GitHub Pages. Uses **Markdown** for posts and **Jekyll** for static HTML generation.
- **27 posts** across the following tags, listed by highest frequency.
  Python, Bash, LaTeX, Linux, Scala, Android, CUDA, C++, Fortran, Mathematica

**GitHub Portfolio** – http://github.com/bamos — **April 2011 – Present**
- Hosts code samples, original source code, and patches for open source projects.
- 18 original repositories.
- 4 forked repositories.

**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.