
TECHNICAL SUMMARY

Languages C, C++, Objective C, C# .NET, Java, Visual Basic .NET, VB6, M, Python, Bash, *Mathematica*, *Emacs* LISP/Common LISP/Scheme, SQL, *T_EX*, and *expl3*

Software *Emacs*, *git*, Microsoft *Word*, *Excel*, *Powerpoint*, *Publisher*, *OneNote*, *Visio*, and *Outlook*, Adobe's *After Effects*, *Premiere Pro*, *Audacity*, *Redmine*, *Eclipse*, *Travis CI*, *Wordpress*, and *Visual Studio 2008–2013*

Operating Systems Windows 7+, Mac OS X, and Red Hat Enterprise Linux 5/6

Communication Excellent communication skills, both written and oral, with experience in literate programming

EDUCATION AND ACADEMIC EXPERIENCE

Computer Science, B. A.
G. P. A./Major: 3.6/3.9
St. Mary's College
2010–2014
Lexington Park, MD

Coursework *Data Structures and Algorithms*, *Design and Analysis of Algorithms*, *Theory of Computation*, *Programming Languages*, and *Small-Scale Computing*

Honors Dean's List (G. P. A. ≥ 3.5) each semester; Senior Award in Computer Science

Research Worked under Dr. Alan Jamieson in simulating self-stabilizing algorithms. See <http://github.com/vermiculus/ssa-tool>.

Abroad Studied abroad at [University College Dublin](#) in the Republic of Ireland. Worked with Dr. Pádraig Cunningham researching named-entity recognition and social network analysis in English literature. (Jan–May 2013)
See <http://github.com/vermiculus/snael>.

PROFESSIONAL EXPERIENCE

Software Developer
Jan 2015–(Present)
[Epic Systems Corporation](#)
Verona, WI

Junior Software Dev.
June 2014–Jan 2015
[General Dynamics](#)
Fairfax, VA

Server Administrator
Sept 2013–May 2014
[St. Mary's College](#)
St. Mary's City, MD

Intern
May–Sept 2013
[Progeny Systems, Inc.](#)
California, MD

Student Technician
2010–2013
[St. Mary's College](#)
St. Mary's, MD

Software Developer
2008–2011
[Capital Women's Care](#)
Silver Spring, MD

■ To be determined...

■ Maintained and enhanced existing software solution using X programming.

■ Redesigned graphical system to adhere to best practices in object-orientation.

■ Consolidated duplicated functionality and polished an NFS mount manager.

■ Prepared and implemented an authenticated documentation server using [Redmine](#).

■ Maintained the hardware, software, firewalls, and other security measures for the department's subnetwork of 10–15 servers (both physical and virtual) via remote Linux administration using *ssh*/PuTTY.

■ Created, documented, and maintained several virtual systems and virtualized existing infrastructure systems with vSphere/KVM via primarily remote Linux administration.

■ Independently responded to and resolved non-critical emergency situations swiftly with minimal down-time or impact to end-users.

■ Supported clients in the use of the network and their software, troubleshooting both software and hardware problems on both Windows (Dell) and Apple computers.

■ Inventoried and organized departmental property.

■ Prepared aged hardware for release within state security specifications.

■ Formalized and removed ambiguities to establish and document project scope.

■ Developed and maintained several C# .NET applications to improve hiring workflow for multiple offices in the tri-state area.

PERSONAL INFORMATION

- Experienced user of \LaTeX , a system used to produce documents of high quality and typographical consistency.
- Currently an official representative of [StackExchange](#) to the international [\$\text{\TeX}\$ User's Group](#).
- Edited and produced a promotional video for a [diversity program](#) at St. Mary's College (archived).
- Currently maintain/participate in several [open-source projects](#) using more conventional languages, such as *Emacs* LISP, Python, Java, and Objective C.

OPEN SOURCE CONTRIBUTIONS

[{GITHUB.COM/VERMICULUS}](https://github.com/vermiculus)

I also maintain (or participate in) several open-source projects using more conventional languages, including LISP, Python, Java, and the C languages. (This does not include the many discussion-based contributions I've made.)

StackAPI	vermiculus/stack-api	XML, XSLT, XSD, XPath, Python
Language-native method stub and type generation using a scraped API		2014 – (Current)
sx.el	vermiculus/sx.el	<i>Emacs</i> LISP
An ongoing project to create a full-featured StackExchange Mode for <i>Emacs</i>		2013 – (Current)
ssa-tool	vermiculus/ssa-tool	Python, NetworkX, PyYAML
An editor for and simulator of self-stabilizing algorithms		2013 – (Current)
S.N.A.E.L.	vermiculus/snael	Python
A natural language analyzer that constructs social networks		Jan – May 2013
MobileOrg	MobileOrg/mobileorg	Objective C
An asynchronous iOS complement to <i>Emacs</i> ' OrgMode		May – May 2013
AUC\TeX-Lua	vermiculus/auctex-lua	<i>Emacs</i> LISP
An extension to AUC \TeX to support embedded Lua code		Aug – Aug 2013
ButterSeal	vermiculus/butterseal	(LibGDX) Java
An Android game written for <i>Game Design and Development</i>		Sept – Dec 2013
C-UTIL	vermiculus/c-util	C
A set of object-oriented utilities for ANSI C		2012 – (Current; Stagnant)
LDA/SMC Website		WORDPRESS, discountASP
A new website for the local Learning Disabilities Association		March 28 – 30 2013

RELEVANT INTERESTS

I have several interests in which I have no formal training, but have significant experience. These include:

- structured documents, especially in the context of \downarrow
- custom electronics, and
- literate programming — a documentation-centric paradigm for software development and reproducible research,
- typography.

Additional details on my projects and interests can be found at <http://www.seanallred.com>.