

Ethan Graham Holder
(540) 589-2020
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1817 175th Pl SE
Bothell, WA 98012

OBJECTIVE

Software engineer position working on cloud infrastructure.

EDUCATION

Virginia Polytechnic Institute & State University, Blacksburg, VA. 24060
Dual B. S. / M. S. in Computer Science in honors with Business and Mathematics minors.
B.S. GPA: 3.697 Graduation: May 2014 M.S. GPA: 3.767 Graduation: May 2015

EXPERIENCE

2015 August-Present **Web Solutions Engineer I and II**, Google, Kirkland, WA

- Designed, prototyped, implemented, and maintained tools and solutions for enterprise customers.
- Lead cross-functional project developing improved launch process for cloud product teams.
- Received 9 different gThanks awards ranging from kudos to peer and spot bonuses.
- Contributed supplementally to various internal and production services outside of focus area.

2014 May-August **Software Development Engineer Intern**, Microsoft, Bellevue, Wa.

- Developed JS software for visualizing enterprise package management solution.
- Implemented C# interfaces for Neo4J-based backend graph infrastructure.
- Transitioned existing query structure from pre-calculated values to an extensible framework.

2012 January-December **Software Developer Co-op**, IBM, Raleigh, NC

- Developed Java software to test device driver and firmware update packages.
- Implemented shell/terminal calls on Windows and Linux from Java.
- Planned, evaluated, and presented work items within agile paradigm.

PROJECTS

[Certificate Enrollment for Chrome OS](#) (currently 74k users, 260 reviews, 4.5/5 stars)
[uProxy](#) for Organizations on [Google App Engine \(GAE\)](#) and [Heroku-Flask](#)
[Forseti](#) (<http://forsetisecurity.org/>)
[Google Cloud Platform \(GCP\) Professional Services \(PSO\) GitHub](#)

HONORS & SCHOLARSHIPS

Google \$1000 spot bonus from Michael Irons (2017)
Google \$175 peer bonuses from Chris Hein, David Karam, Amir Safavi, Derek Slovin, Eric Beach, Mike Tyka, and Carise Fernandez (2015-2017)
Virginia Tech Dean's List with Distinction (2010-2014)

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PUBLICATIONS

2014 December-2015 May **Musiplectics MS Thesis Research Project**,
Virginia Tech, Blacksburg, Va.

- Define an objective platform for analyzing musical complexity based on fundamental elements of music for all instruments.
- Implement software system to parse MusicXML using the visitor pattern, which tokenizes, weights, and aggregates musical elements into a complexity score.
- Compare objective complexity scores to subjective grades based on instructional syllabi.

Holder E. Musiplectics: Computational Assessment of the Complexity of Music Scores. *Virginia Polytechnic Institute and State University*, Master's Thesis, April 23, 2015
(<https://vtechworks.lib.vt.edu/handle/10919/52376>).

Holder E. Musiplectics: Computational Assessment of the Complexity of Music Scores. *ONWARD! 2015*, ACM International Symposium on New Ideas, New Paradigms, and Reflections on Programming and Software (Onward!), October 25-30, 2015 (<http://dl.acm.org/citation.cfm?doid=2814228.2814243>).

2014 January-May **Native Gap Undergraduate Research Project**,
Virginia Tech, Blacksburg, Va.

- Implement software system to translate generic HTML and PhoneGap applications into identical native Android applications.
- Conduct in depth literature review on translation systems surrounding HTML.
- Develop and find generic HTML applications for acceptance testing.

Holder E. Native Execution of Mobile Applications Across Platforms. *Virginia Polytechnic Institute and State University*, Honors Bachelor's Thesis, May 7, 2014.

2013 January-December **Cloud Twin Undergraduate Research Project**,
Virginia Tech, Blacksburg, Va.

- Extend software system for translating mobile applications across platforms.
- Define intermediate structure as translation basis between mobile platforms.
- Develop Android and Windows Phone applications for acceptance testing.

Holder E., Shah E., Davoodi M., Tilevich E. Cloud Twin: Native Execution of Android Applications on the Windows Phone. *Automated Software Engineering 2013*, New Ideas, November 11-15, 2013
(<http://dx.doi.org/10.1109/ASE.2013.6693119>).

Holder E. Cloud Twin: Interactive Cross-Platform Replay for Mobile Applications. *SPLASH 2013*, ACM Student Research Competition, October 26-31, 2013 (<http://dx.doi.org/10.1145/2508075.2514879>).

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ACTIVITIES

g2g (Googler to Googler) Jedi Program Teacher (2015-Current)
Google IO Extended Volunteer (2016)
Historic Flight Foundation Flight Day Volunteer (2016)
Google Serve Lake Sammamish Park Cleanup Volunteer (2016)
Habitat for Humanity Volunteer (2016)
MathCounts Regional and State Competitions Volunteer (2016)
Upsilon Pi Epsilon Computer Science Honor Society President (2013-2015)