

# DANIEL EPSTEIN

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## EDUCATION

**UNIVERSITY OF VIRGINIA, SCHOOL OF ENGINEERING AND APPLIED SCIENCE, Charlottesville, VA** May 2012

**Majors: Computer Science; Minor: Applied Math**

- **GPA: 3.8/4.0** (Dean's list all completed semesters, Intermediate Honors)

*Relevant Computer Science Courses:* Algorithms; Game Design; Computer Graphics; Software Engineering (Graduate Level) Web Information Systems Engineering; Operating Systems; Computer Architecture; Computer Vision; Artificial Intelligence; Human Computer Interaction

*Relevant Math Courses:* Multivariable Calculus; Differential Equations; Linear Algebra; Probability

*Relevant Fall 2011 Courses:* Algorithms (Graduate level); Statistics; Stochastic Processes

**THOMAS JEFFERSON HIGH SCHOOL FOR SCIENCE AND TECHNOLOGY** June 2008

- **GPA: 3.7/4.0**, Graduated, National Honor Society Member, National AP Scholar

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## RESEARCH EXPERIENCE

**LAVA Lab, UNIVERSITY OF VIRGINIA** Aug 2010- Present

- Submitted paper entitled "SIMD Performance and Yield Optimization with Multi-granularity Redundancy" to Design Automation Conference (DAC) 2012
- Determined components to replicate in order to maximize performance and minimize manufacturing cost
- Focused on SIMD processors which can greatly benefit from component redundancy
- Used simulated annealing to explore large design space
- Nominated for CRA Outstanding Undergrad Researchers Award 2012

**International Summer Science Institute, WEIZMANN INSTITUTE, Rehovot Israel** Jul 2008- Aug 2008

- Developed and programmed model in Java for automotive traffic flow
- Wrote research paper for internal summer research journal

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## WORK EXPERIENCE

**Software Development Engineer in Test (SDET) Intern, MICROSOFT, INTERACTIVE ENTERTAINMENT BUSINESS, Redmond, WA** May 2011- Aug 2011

- Designed and developed an Augmented Reality Whack-A-Mole game using new features in Windows Phone 7 Mango Operating System
- Wrote automated tests to verify navigation, UI, gameplay, and victory conditions
- Spent 3 weeks as an SDET writing automation for Xbox Companion application (to be released)

**Teaching Assistant, DEPARTMENT OF COMPUTER SCIENCE, UNIVERSITY OF VIRGINIA** Aug 2009- Present

- Courses: Program and Data Representation (*Fall 2009, Spring 2010*), Algorithms (*Fall 2010, Spring 2011*), Game Design (*Fall 2011*)
- Assisted students during weekly laboratory, held office hours to aid students in need
- Selected by CS Dept. faculty for the Louis T. Rader Award in May 2011 for excellence in Teaching

**Software Developer, NOMUDA GAMES, Charlottesville VA** May 2010- May 2011

- Co-wrote engine for an adventure-puzzle game for Android phones, designed and coded seven logic puzzles
- Implemented in-game picture taking mechanism with ability to upload to Facebook and Twitter

**Software Engineering Intern, SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC), Bethesda MD** May 2009- Aug 2009

- Worked on SMMIT submarine trainer, wrote code to cache noise loss data between simulations
- Developed GUIs for error reporting using Python and PyGTK

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## LEADERSHIP, COMPETITIONS, AND ACTIVITIES

**International Collegiate Programming Contest (ICPC), Member, World Finals Participant** Apr 2010- Present

- Team came in 3<sup>rd</sup> place at regional competition in 2010, 7<sup>th</sup> place at regional competition in 2011
- Qualified for 2011 World Finals competition in Orlando, Florida; Team solved 2 problems

**UVA Student Game Developers, Treasurer (Mar 2009-Mar 2010); Vice President (Mar 2010-May 2011); Asset Administrator (May 2011-Present)** Sep 2008- Present

- Currently leading a team working on a Kinect for PC version of 3D 2-player Pong
- Participated in 36-hour Rosetta Stone Game Jam twice, made game to teach programming concepts and an ink-based tower defense game (which placed 2<sup>nd</sup> in the student division)

**Brown College [Dormitory] Governance Board, Webmaster (Apr 2009-Aug 2010, May 2011-Present); Shama Llama Ding Dong [Vice President] (Aug 2010-May 2011)** Apr 2009- Present

- General maintenance of Brown College website, adding additional user functionalities
- Added interface to allow students to buy and sell textbooks using PHP with a MySQL backend