

# Andrew M<sup>c</sup>Knight

## Résumé

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### Education

- 2013 **M.Sc., Dept. of Computer Science, Old Dominion University, 3.71 GPA.**  
*Research:* bioinformatics, robotics, image processing, meshing
- 2012 **B.Sc., Dept. of Computer Science, Old Dominion University, 3.83 GPA.**  
*Minor:* actuarial mathematics

### Experience

#### Vocational

- 2011–Present **Mobile Application Developer, Insight Therapeutics LLC, Norfolk, VA.**
- Solo management of native iOS application lifecycle
  - Medical e-literature and interactive physician tools written in Objective-C
  - Three applications in the iTunes store: [ClotRx](#), [DementiaRx](#) and [Antibiotic Kinetics](#)
- 2012 **Mobile Application Developer, ODU Systems Lab, Norfolk, VA.**
- Accelerated progress of application now in the iTunes store: [ChirpXM](#)
  - Location based social networking application written in Objective-C/J2EE
  - Multithreading, databasing, asynchronous networking with Java backend on AWS
  - Supervised two international student interns
- 2011 **Intern Developer & Tester, Intergraph Corporation, Hampton, VA.**
- .NET and SQL programming in large (40+ million LoC) shipbuilding CAD application
  - Continuous integration, Agile scrum, Coverity, QTP
  - Proprietary numeric/geometric software regression analysis
  - International presentations and collaboration

#### Academic

- 2012–Present **Research Assistant, Old Dominion University, Norfolk, VA.**
- Java and C++ algorithm development utilizing CGAL, Boost and Jama
  - Image processing, robotics and machine learning applications in bioinformatics
  - Multiple publications and conference presentations
- 2012–2013 **Lab Instructor, Old Dominion University, Norfolk, VA.**
- Online delivery of CS 333: Problem solving and programming in C++
  - Lab instructor for CS 250: Intermediate programming in C++
  - Assistant instructor for CS 150: Introduction to programming in C++
  - Website maintenance, grading, general student guidance

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## Coursework

- 2011–2012 **Seminar Project Co-lead**, *Old Dominion University*, Norfolk, VA.
- 7 member team developing personalized, crowd-sourced traffic application
  - Sole developer of native iOS application in Objective-C with Java backend
  - 4 presentations given to visiting professors and industry executives
  - Highest scoring project of three development teams

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## Computer Skills

### Languages

- Best** Java, C/C++/Objective-C, CSS, HTML, Ruby, XML
- Strong** Javascript, REST, JSON, SQL, PHP, DOM,  $\text{\LaTeX}$ , .NET (C#/VB), AS3.0
- Basic** J, Perl, PLSQL, Python

### Frameworks

- Java** Guava, Jama
- C++** Boost, CGAL
- iOS** Facebook SDK, AddressBook/UI, Core Animation, Core Audio, Core Data, Core Location, Core Graphics, MapKit, MessageUI, UIKit

### Environments

Netbeans, Eclipse, Subversion/TFS/Git, UNIX, Linux, AWS, VersionOne, Visual Studio, Xcode/Instruments, Matlab, UCSF Chimera, Gorgon, Fireworks, Dreamweaver, Flash Studio, DOS, Microsoft Windows/Office

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## Honors & Awards

- 2013 **Gene Newman Award**, *Best overall paper*, Virginia Modeling, Analysis and Simulation Center Capstone conference.
- 2012 **Graduate with Distinction**, *Awarded with B.Sc.*, Old Dominion University.
- 2012 **Undergraduate Research Award**, *Outstanding undergraduate achievement*, Old Dominion University, Spring Undergraduate Research Fair.
- 2011 **First Place**, ODU-ACM Programming Contest.
- 2010-2011 **Dean's List**, Old Dominion University.

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## Professional Associations

- 2013** Association for Computing Machinery - Student Member
- 2013** Institute for Electrical and Electronic Engineers - Student Member
- 2012** Golden Key International Honor Society, Member
- 2011** Tau Sigma Honor Society, Webmaster, ODU chapter

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References can be provided upon request.

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