## Niko Grupen

Software Engineer at Apple Inc.

## Summary

N/A

## Experience

#### **Software Engineer at Apple**

October 2016 - Present

Design and development of full stack engineering projects involving Machine Learning, NLP, Bluetooth, Indoor Location, and Mobile Device Management across the entire Apple ecosystem (iOS, macOS, watchOS).

#### **Undergraduate Research Assistant**

September 2014 - May 2016 (1 year 9 months)

Assistant for "CAVE Systems for Immersive Video" project which received largest NSF grant in school history.

Contributor to iOS CAVE control interface project that allows an iPad to control and display 360 degree spherical immersive video in a CAVE.

#### **Software Engineer Intern at Apple**

May 2015 - August 2015 (4 months)

Designed and developed a prototype macOS and iOS proximity-based security tool.

Techniques used include: Core Bluetooth, Multipeer Connectivity, Multithreaded Programming, Core Graphics, JSON, AES Encryption and Decryption, iOS Secure Enclave.

#### **Software Engineer and Research Intern**

June 2014 - August 2014 (3 months)

Designed, coded, and tested a trilateration-based indoor localization system with an average position estimate error of 0.530m, using Apple's iBeacon protocol.

Created a sub-room level zone classifier that achieves 92% classification accuracy using machine learning techniques.

#### Merchandiser at The Coca-Cola Company

May 2013 - August 2013 (4 months)

#### **Research Apprentice**

May 2011 - August 2011 (4 months)

Prototyped embedded control software using Arduino and Handyboard.

Assisted the Laboratory with construction and testing for experiments.

### Education

#### Villanova University

Bachelor's Degree, Computer Science, Minors in Mathematics and Economics, 2012 - 2016

**Activities and Societies:** Phi Beta Kappa Honor Society - 1 of 4 members of the University awarded as a Junior Upsilon Pi Epsilon - International Honor Society for Computer and Information Disciplines Omicron Delta Epsilon - International Honor Society for Economics Economics Society MIS Society Phi Sigma Kappa - Social Chair, Philanthropy Committee

#### **Deerfield Academy**

High School, 2008 - 2012

**Activities and Societies:** Advanced Placement Chemistry Advanced Spanish with Community Service Student Teacher, Deerfield Elementary School Day Student Proctor Varsity Baseball - Captain

#### Honors and Awards

2016 Blaise Pascal Medallion for Academic Excellence in Computer Science, Most Outstanding Undergraduate Research Project, First Place, Computer Science and Mathematics Undergraduate Research Competition, First Place, CCSCNE Undergraduate Research Competition, Finalist, Finalist

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Contact Niko on LinkedIn