

# Alexander Keiya Shoop

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[akshoop.github.io](https://github.com/akshoop)

## EDUCATION:

**Worcester Polytechnic Institute (WPI)**, Worcester, MA

**Master of Science: Data Science**

12/2018

**Master of Science: Financial Mathematics**, GPA: 3.71/4.0,

12/2017

**Bachelors of Science: Actuarial Mathematics and Computer Science**, GPA: 3.65/4.0, High Distinction

05/2016

## EXPERIENCE:

**Healthcare Data Analytics Intern**, Harvard Pilgrim Health Care, Wellesley, MA

06/2018 – 07/2018

- Supported the Market Analytics team in engaging in cost of care and trend discussions at the market and executive level
- Developed and presented a fully functional and validated Chi-Square Statistical Test Dashboard in Tableau with dynamic selections and integrated business analytics and data from existing business intelligence
- Participated and was a part of the winning cross-functional team that designed a mockup of the member experience view in the Employer Analytics Redesign Contest

**ITS Helpdesk Specialist**, WPI, Worcester, MA

09/2012 – 05/2018

- Provided customer service and information technology support
- Resolved front-desk and call center support requests concerning technical issues
- Led and trained other student workers via one-on-ones

**Actuarial Intern**, Sun Life Financial, Wellesley, MA

06/2017 – 08/2017

- Updated the experience studies for annual lapse for wealth management business and expenses for reinsurance business and designed a new death claim lag study, using MS Excel and MS Access
- Researched the actuarial life insurance industry standards of practice and protocols

## RELEVANT PROJECTS:

**Independent Study, Evaluating Early Stage FinTech Companies via Big Data Analytical Tools**,

08/2017 – 12/2017

WPI, Cambridge, MA

- Strategized with three graduate students and built an implementation plan for big data analytical projects to be carried by a 6-member undergraduate project team for sponsor companies Vestigo Ventures and Cogo Labs
- Catalogued FinTech startup investment deals received by VC firm Vestigo Ventures using proprietary SQL database
- Developed a probabilistic algorithmic prediction model for Cogo Labs on their ~3.0 petabytes consumer informational database

**Major Qualifying Project (MQP), Development of an Operational Process for Continuous Delivery**,

10/2015 – 12/2015

WPI, Wall Street project center

- Researched continuous delivery tools for DevOps division of Barclays Investment Bank
- Developed an automated job creation strategy using Jenkins in coordination with Promoted Builds plugin for Prime Financing team
- Presented to the team's manager a visualization of software builds and promotions through pivot tables/charts

**Software Engineering Project**, WPI

10/2014 – 12/2014

- Collaborated in a team of 12 to develop a Kanban-style project task manager
- Programmed in Java and Swing using Agile and test-driven development
- Learned good practices in Git and Github for version control

**Interactive Qualifying Project (IQP), Analysis of Consumer Energy Behavior in the Arboretum**,

05/2014 – 06/2014

Worcester, England

- Completed a team project abroad in creating a baseline energy consumption profile of the Arboretum neighborhood in Worcester through door-to-door surveying and canvassing
- The team presented findings to the Environmental Sustainability office of the University of Worcester and to The Lord Faulkner of Worcester

## SKILLS:

**Programming languages:** Python, R, JavaScript, Git, SQL, Java, C, C++

**Software:** Tableau, Bloomberg Terminal

**Languages:** Trilingual (English, Japanese, French)

**CERTIFICATIONS:** Society of Actuaries (SOA) Exam P/1, Exam FM/2, Bloomberg Market Concepts