

EDUCATION**Smith College**, Northampton, MA (expected May 2017)

- B.A. Double major: Computer Science and Government. GPA: 3.87. Dean's List (2014 Academic Year)

Relevant Coursework: Data Structure, Intro to Artificial Intelligence, Microprocessor and Assembly Language, Advanced Calculus, Advanced Programming, Linear Algebra, Intro to Discrete Mathematics, Unsupervised Machine Learning**Harvard University**, Cambridge, MA: Visiting Undergraduate Student Program (2016 Spring)**Relevant Coursework:** Economics and Computation; Visualization.**Stanford University**, Stanford, CA: Summer Session (2015 Summer)**Relevant Coursework:** Design and Analysis of Algorithms; Client-Side Internet Technologies.**Programming languages and libraries:** Python, Java, HTML, JavaScript, CSS, R, D3.js, Vue.js, and Angular.js.

PROGRAMMING EXPERIENCE (GitHub: <https://github.com/TianyunXu923>)**Research Assistant:** Information Technology Services, Smith College, Northampton (Fall 2016- present)

- Assist geology professor design and develop an online interactive textbook. Build up MySQL database using PHP and JavaScript.

Software Engineer Internship: Abeja, Inc., Tokyo, Japan (Summer 2016)

- Member of Dashboard team: built the Dashboard application for visualizing business-related data to the clients. Worked in web technologies: Vue.js-based reactive components, D3-based charts, and canvas-based heat maps. Optimized Dashboard UX.
- Deployed Google Firebase. Worked on user authentication. Implemented various APIs.
- Became a scrum master and agile team master.

Silicon Valley Innovation Academy, member of Loco project: Stanford University (Summer 2015)

- Designed and developed a website presentation for Loco project (a virtual platform to connect local cooks and college students). Gained a hands-on experience of the entrepreneurial startup process.

CodeU Mentorship Program, Participant: Google (Summer 2015)

- Worked on a series of technical exercises on data structures and algorithms under the guidance of a Google engineer mentor.
- Completed Udacity's Developing Android Apps course, and worked with two other participants to create Travel Logger app (an Android app to store travel journals) using Android Apps development techniques and web API technique in three weeks.

Research Assistant: National Technical University of Athens, Lavrion, Greece (Summer 2014)

- Assisted hydro engineering professor to develop Lavrion aquifer geological map on GIS.
- Took initiative to design Python program to calculate coordinates of observed geological features and to produce a new geological map. Implemented EzGraphics (open source Python module) that encapsulated the basic feature of Tkinter in the Python program.

Programming Course Projects (Personal Website: <http://tianyunxu923.github.io/>)

Visualization (Spring 2016): Visualizing the Effect of Natural Disaster on Human Life.

Advanced Programming (Fall 2015): U.S. States Water Withdrawals.

Introduction to Artificial Intelligence (Spring 2015)

- Pac-Man project: practice concepts such as informed state-space search, probabilistic inference, and reinforcement learning.

Programing With Data Structure (Fall 2014)

- Implemented a MVC in Processing to visualize network of vertices and calculate and highlight the shortest path.

ADDITIONAL EXPERIENCE**Web Editor:** The Sophian- the Independent Newspaper of Smith College (Spring 2016- Present)

- Ran thesmithsophian.com through Wordpress; uploaded articles and photos; designed web layout.

Chair: Pioneer Valley Alumni Impact- Smith College Chapter (Fall 2015 - Present)

- Planned 3 career workshops and events, coordinated communication with speakers and trainers and updated events reviews.

Teaching Assistant: Smith College Computer Science Department (Spring 2015)

- Tutored students from intermediate level computer science courses (size of class: 115 student in total).
- Gave professors feedback and suggestions about course design.