

# Alex Tsun

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## OBJECTIVE

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Seeking a software engineering summer internship to gain more industry experience (preferably in the machine learning or data science fields to apply my statistical and mathematical skills).

## EDUCATION

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**University of Washington** (Seattle, WA) (Sep 2014 – Jun 2018)  
Bachelor of Science: Computer Science, Statistics, Mathematics (Comprehensive). **Cum GPA: 3.87, Major GPA: 3.94**

## WORK & VOLUNTEER EXPERIENCE

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**Undergraduate Teaching Assistant**, University of Washington (Seattle, WA) (Sep 2015 – Present)

- Leading quiz section, writing/grading exams, holding office hours, etc. (CSE 312: Probability & Statistics for Computer Science).

**Engineering Intern**, BloomReach, Inc. (Mountain View, CA) (Jun 2015 – Sep 2015)

- Developed a new UI for retailers to edit their product pages (e.g. reordering products, adding products, etc.). This new UI
  - Removed the need for a proxy server, which saved company money to operate it and engineers' time/effort to maintain it.
  - Reduced editor latency for each product page from ~10-30 seconds to ~1-2 seconds (compared to the existing UI).
- Used tools/skills such as HTML, CSS, JavaScript, jQuery, React.js, Flux, RefluxJS, Ajax, Play!, Node.js, CommonJS, and Git.

**Tutor**, InstaEDU (Online) (Oct 2014 – Dec 2014)

- Taught computer science, statistics, and mathematics to high school and college students.

**Eagle Scout**, Boy Scouts of America (San Jose, CA) (Jun 2007 – Mar 2013)

- Performed lots of community service (e.g., planned/executed my Eagle service project, created a website for my patrol, etc.).

## PERSONAL PROJECTS

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**Distress Detector**, DubHacks (Seattle, WA) (Oct 2015)

Integrated Microsoft Band with an app to sense whether the user is distressed when they are in potentially dangerous situations. It monitors the user's heart rate to do so and sends a distress message to an emergency contact if so.

**Personal Website**, InternHacks (San Francisco, CA) (Jul 2015)

Created a personal portfolio website using HTML, CSS, JavaScript, jQuery, and Ajax in just a few hours (link at top).

**Rhythmic Ride**, DubHacks (Seattle, WA): **Won 1<sup>st</sup> place for "Best Use of Mojio API"** (Oct 2014)

Used car and location data to determine current speed and speed limit, and adjust music track (tempo) to subconsciously change the driver's speed toward the speed limit. Worked to play audio and ensure smooth transitions between songs. Worked in a team of five.

**Merit Badge Android App** (Cupertino, CA): **Over 14,000 downloads** (Jan 2014)

Wrote a UI for scouts to look up requirements (and partial answers) for popular and required merit badges.

**ConnectMore Android App** (Cupertino, CA): **Over 1,700 downloads** (Nov 2013)

Provided a variation of the well-known Connect 4 game. Used Java awt and swing libraries for graphics (more advanced GUI).

## HONORS & AWARDS

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**Annual Dean's List**: Satisfied Dean's List requirements every quarter for 2014-2015 school year. (2015)

**Microsoft Code Hunt at University of Washington**: Won 3rd place. (2015)

**Google Games**: Placed top 12 in Seattle and Kirkland competitions. (2015)

**AMC 12 Honor Roll**: Qualified for American Invitational Mathematics Examination (< top 5%). (2014)

**UW CSE Direct Admission**: Directly admitted to UW CSE program as a freshman (< top 5%). (2014)

**National AP Scholar**: Earned average score of 4 or higher on all AP exams, and minimum score of 4 on at least 8 AP exams. (2014)

## RELEVANT COURSEWORK (COMPLETED)

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**Computer Science**: Programming I/II (Java), Data Abstractions (Java), Hardware/Software Interface (C, Assembly), Discrete Math, Probability & Statistics, Beginning Programming (C++), Game Development (JavaScript), System/Software Tools (Linux)

**Mathematics/Statistics**: Calculus I/II/III, Real Analysis I/II, Linear Algebra, Differential Equations, AP Statistics

## RELEVANT COURSEWORK (PLANNED 2015-2016)

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**Computer Science**: Machine Learning, Intro Algorithms, Databases (SQL, Azure), Software Design (Java, git), Systems Programming (C++), Statistical Methods in Computer Science, Design & Analysis of Algorithms

**Mathematics/Statistics**: Probability & Mathematical Statistics, Probability & Statistical Inference I/II, Advanced Multivariable Calculus, Number Theory