

# Jesse Xu

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## Education

**UNIVERSITY OF PENNSYLVANIA – EXPECTED GRADUATION MAY 2021**

**B.S.E. in Computer Science** from the School of Engineering and Applied Science.

**Minor in Engineering Entrepreneurship** from the School of Engineering and Applied Science.

**Coursework:** Scalable and Cloud Comp., Prog. Languages and Tech, Market and Social Systems on the Internet, Mathematical Foundations of Comp. Sci., Digital Design, Negotiations, Corporate Finance

## Employment

**SOFTWARE ENGINEERING INTERN | UNISYS**

JUNE 2018 – AUGUST 2018

Designed and built a DevOps application to optimize I/O operations by allowing engineers to easily read in the properties of a selected disk or system of disks, a task previously accomplished through a hex editor. Created in Visual Studio through .NET's Windows Presentation Foundation (WPF), C# backend.

Modified an existing hex editor tool to allow read-modify-write of non-Unisys formatted disks.

**RESEARCH ASSISTANT | PENN INSTITUTE FOR BIOMEDICAL INFORMATICS**

SEPTEMBER 2017 – APRIL 2018

Compiled a model of re-admittance rates for patients of various cancers and illnesses by analyzing selected hospital data sets for key characteristics (age, weight, delay between visits, etc.) through the PennAI software.

**RESEARCH INTERN | CHINESE ACADEMY OF SCIENCES**

JUNE 2016 – AUGUST 2016

Illustrated how the Zika Virus affects the development of brain cells in newborn mice using imaging software on protein-stained brain segments, measured protein expression of affected brain cells using Western Blot analysis

Predicted financial impact of virus on the healthcare system of Southeast Asia, an area with limited infrastructure.

## Leadership Experience

**RESEARCH, INNOVATION, ENTREPRENEURSHIP PROGRAM (RIE):** Programming and outreach committee leader responsible for speaker series and outreach, doubled freshmen participation Spring of 2017.

**BIOMEDICAL ENGINEERING SOCIETY (BMES):** Marketing and Technology committee chair in charge of garnering interest in events and maintaining the chapter website.

## Side Projects

**SEARCHLT (JAVASCRIPT):** Google Chrome extension built as an alternative to the native page search, passively displays all other occurrences of the user's highlighted term or phrase across the page, as well as key search terms if the user lands on the page through a search engine.

**ECHO (REACT NATIVE):** A lifestyle mobile application for IOS that uses voice-recognition to create personalized alarms based on self-recorded audio messages.

**SIDEWINDER (JAVA):** A multiplayer twist to the classic game of snake that allows players to compete against each other for powerups and points.

**BREATHALOCKER (ARDUINO):** Arduino-based bike lock that only opens for users that can pass a breathalyzer test as a further precaution against inhibited riding.

## Skills and Achievements

### TECHNICAL SKILLS

**Programming languages:**

C#, Java, Javascript, Python, OCaml, XAML

**Frameworks and Environments:**

Visual Studio, WPF (.NET), React Native, React.js, Node.js, Bootstrap, AngularJS

**Modeling software:**

Adobe Photoshop, Solidworks/CAD

**Languages:**

Fluent in spoken and written Chinese (Mandarin)

**Proficient in:**

C/C++, Unix, MatLab, Git

### ACHIEVEMENTS

(2013) Became the youngest scout in PA district 9 to earn the rank of Eagle Scout

(2015) SAT: 2400, SAT Math II: 800, SAT Chem: 800

### PERSONAL INTERESTS

Human-Computer Interaction, App Development, Machine Learning, Product Design, Philadelphia Eagles