

Ming Zhang

🏠 | 3914 Spruce St Philadelphia, PA 19104
📞 | (215)300-6490 🌐 | www.mingzhang.me ✉ | mingzha@seas.upenn.edu

EXPERIENCE

Explorer Intern May 2017–Present

at **Microsoft**

Start prototyping cyber attack visualization tool to facilitate and accelerate investigation and defense in Microsoft's Cyber Defense Operations Center using holographic 3D graphics on Microsoft **HoloLens**; design 3D graphics on **Unity** platform with **C#** scripting; analyze and optimize frame rendering and calculating to accommodate HoloLens's processing capability

Fellow Oct 2016–Present

at **Moelis Access Science Program**

Propose curriculum in computer science for K-12 schools in West Philadelphia; volunteer to teach Scratch programming to 20 students in classroom on a weekly basis; present feedback during weekly meetings

Research Assistant Jun–Sep 2016

for **Low Resource Languages for Emergent Incidents**

Worked in the lab of Prof. Mitchell Marcus for the Exploiting Quantitative Universals for Unsupervised Acquisition of Language Structure (EQUUALS) Project as part of DARPA's Low Resource Languages for Emergent Incidents Program. Assisted in building a learner for language classification in **Python**; prepared corpus data for over 80 languages from Wikipedia XML dumps; evaluated grammar rules on the corpus

Co-President Sep 2016–Present

of **Pling: Penn Undergrad Linguistics Society**

Re-establish weekly event "Linguistically Speaking"; promote events on social media; manage Facebook group with over 90 members; increase participation of general body; communicate with Penn Linguistics Department for funding and faculty speakers

Web Developer & Video Editor Sep 2015–Present

at **The Daily Pennsylvanian**

Build webpages for featured news stories and web templates for regular stories; maintain and improve the webpages based on statistics of usage; collect interview and b-roll footage on a weekly basis; create and manipulate graphics, film pieces, music, and special effects in a logical and attractive manner using Final Cut Pro

Tutor Jan 2016–Present

for **CIS-160: Mathematical Foundations of Computer Science** and **CIS-120: Programming Languages and Techniques I**

Course materials include data types and data representation, test-driven development, programming patterns, functional programming, and object-oriented programming. Programming languages include **OCaml** and **Java**

EDUCATION

University of Pennsylvania May 2019

Cumulative GPA **3.88** / 4

Dual Degree Program

B.S.E. in **Computer Science**, School of Engineering & Applied Science

B.A. in **Linguistics**, College of Arts and Sciences

FEATURED COURSEWORK

Computer Science Related

Programming Languages and Techniques II: Data Structures in Java
Introduction to Algorithms
Introduction to Computer Architecture
Computer Organization and Design
Automata, Computability, and Complexity
Introduction to Artificial Intelligence
Discrete Probability, Stochastic Processes, and Statistical Inference

Linguistics Related

Introduction to Linguistics
Sound Structure of Language
Introduction to Syntax
Introduction to Sociolinguistics
Writing Systems

SKILLS & ABILITIES

Languages

Native in Mandarin Chinese; fluent in German (CEFR German Level A2); comprehensive in French (SAT French 720/800); basic American Sign Language, Cantonese, Spanish, Russian, Latin, and Japanese

Computer Related

Python, Java, HTML, CSS, JavaScript, PHP, MySQL, C, C#, Assembly language, Objective-C, Xcode, Haskell, OCaml, Git, Visual Studio, Unity3D, Photoshop, Mathematica, \LaTeX , Final Cut Pro, Microsoft Office

AWARDS

Best Social Impact Hacking Prize Jan 2016

at **PennApps XIII**

with Web App "Foodship" at www.foodship.me

Silver Medal Jul 2014

at **2014 International Linguistics Olympiad**

among top 9%

5th Place at Team Round Feb 2014

at **2014 Harvard-MIT Math Tournament**

out of 88 teams

THANKS FOR READING!