Melanie A. Chow

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EDUCATION

University of Chicago, Chicago, IL   *Expected June 2021*
Bachelor of Science in Computer Science | GPA: 3.91

RELEVANT COURSES: Computer Systems • Networks and Distributed Systems • Programming Languages • Usable Security and Privacy • Inventing, Engineering, and Designing I/O Devices

SKILLS & TOOLS: C • JavaScript • Python • Java • HTML • CSS • R • SQL • Angular • Express JS • Node JS

EXPERIENCE

Braintree (PayPal) – *Software Engineer Intern* / Chicago, IL   *June 2019 - Present*
- Worked alongside senior engineers on the Infrastructure team to redesign secrets management, and build public key infrastructure (PKI).
- Created tools and tests to issue, sign, and deploy private and public SSL certificates, shortening workflow time by 90%.
- Developed automated reporting for expiring secrets and access activity, significantly reducing risk of down-time.
- Implemented necessary infrastructure and encryption protocol for private key sharing and verification.

UChicago Core Tutors – *Computer Science tutor* / Chicago, IL   *April 2019 - Present*
- Tutor for the Computer Science Intro Sequence (i.e Data Structures & Algorithms, Computer Systems).

Medivis – *Software Development Intern* / Brooklyn, NY   *June - September 2018*
- Designed and created a CosmosDB database to effectively store, access, and edit anatomy part data.
- Built a web interface for the 3D-modelling team to add and update anatomy parts, and for clients to view and customize their own anatomy tags.
- Built and designed a REST API to regulate data transfer between the interface and database.
- Engaged in code reviews and wrote extensive documentation for each component of the system.

ACTIVITIES

UChicago Tech Team – *Developer* / Chicago, IL   *October 2018 - Present*
- Created a mobile application for the Chicago Department of Health to easily help medical providers look up, research, and report diseases and protocols.

ILC: Entrepreneurship – *President* / Chicago, IL   *September 2017 - Present*
- Plan curriculum and speaker series on business management fundamentals for new members
- Manage partnerships with University administration and local startups.

PROJECTS

HICE (on my wrist)	**Destress Cyb.org**	**SecURL**	**SafeRoute**
June 2019	Uncommon Hacks – 1st Place	May 2019	ByteHacks 2018
Body temperature regulation device that actively detects skin and nearby temperature. Portable heating/cooling watch.	Wearable tech that analyzes brain waves and uses computer vision to blur or replace visual stress triggers.	Browser extension that analyzes and explains relevant info about a site's SSL certificates to the average user.	Web application that determines the safest route home, based on NYC public crime data. Generates a heat map with interactive markers.
(Arduino, C++, Peltier, 3D printed)	(Computer Vision, EEG Headband, Qualcomm Dragonboard 401c)	(Javascript, HTML, CSS)	(Angular, Express JS, Google Maps)