

# RAYMOND FOK

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## EDUCATION

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### UNIVERSITY OF MICHIGAN – ANN ARBOR

Expected April 2019

Bachelor of Science in Computer Science, Minor in Mathematics

Ann Arbor, MI

Overall GPA: 3.94 / 4.00

Honors: Dean's List (2016-2017), CoE Honors Program, Aspland Scholarship Recipient

### NEW YORK UNIVERSITY

Sept 2015 – May 2016

Bachelor of Science in Computer Science and Mathematics

Brooklyn, NY

Overall GPA: 4.00 / 4.00

Honors: Dean's List (2015- 2016), Honors Program (top 5% of class), Promise Scholarship Recipient

## EXPERIENCE

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### Undergraduate Researcher

Sept 2016 – Present

*Crowds + Machines (CROMA) Lab*

Ann Arbor, MI

*Crowdsourcing User-Efficient Clarification Questions* (Submitted to CHI 2018)

- Designed and implemented a crowdpowered workflow for generating end-user effort efficient clarifications in conversational systems.

*WearMail* (Accepted to UIST 2017)

- Co-led research project for privacy-preserving email search from a smartwatch.
- Designed crowd-powered information extractor built with regular expressions and various heuristics.

*Tool Diversity for Realtime Object Segmentation* (Accepted to HCOMP GroupSight 2017)

- Authored paper exploring tool diversity in object segmentation tasks.
- Built web-based GUIs for testing novel 2D object segmentation tools.

*Towards Hybrid Intelligence for Robotics* (Accepted to CI 2017)

- Built hybrid intelligent system to annotate unknown objects in 3D to assist autonomous indoor robots.

### Front-End Web Developer

May – Sept 2017

*Materials Matters*

Ann Arbor, MI

- Designed widgets for desktop and iPad illustrating several Materials Science education demonstrations.
- Used iBooks Author to develop several chapters of an interactive materials science textbook.

### Software Lead

Sept 2016 – Present

*Michigan Mars Rover*

Ann Arbor, MI

- Worked primarily on the autonomous traversal task, using ZED stereo camera and ultrasonic sensors.
- Developed and tested controls for various scientific sensors and a robotic arm.

### Undergraduate Researcher

May – Aug 2016

*Secure Systems Lab*

Brooklyn, NY

- Maintained, updated, and authored code for Seattle, an educational cloud-computing platform.
- Adapted existing Linux deployment code to implement Seattle onto wireless routers.
- Performed extensive unit testing and documented work for future Seattle-OpenWrt researchers.

## SKILLS

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- Software: C++, C, JavaScript, Python, HTML, CSS, PHP, Meteor
- Current coursework: Operating Systems, Computer Security, Modern Algebra, Microeconomics
- Selected publications:
  - S. Swaminathan, R. Fok, F. Chen, T.K. Huang, I. Lin, R. Jadvani, W.S. Lasecki, J.P. Bigham. [WearMail: On-the-Go Access to Information in Your Email with a Privacy-Preserving Human Computation Workflow](#). In *Proceedings of the ACM Symposium on User Interface Software and Technology (UIST 2017)*. Quebec City, Canada.
  - J.Y. Song, R. Fok, F. Yang, K. Wang, A.R. Lundgard, W.S. Lasecki. [Tool Diversity as a Means of Improving Aggregate Crowd Performance on Image Segmentation Tasks](#). In *HCOMP Workshop on Human Computation for Image and Video Analysis (GroupSight 2017)*. Quebec City, Quebec.