Anne Kim

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Education

Massachusetts Institute of Technology: Master of Engineering — *June 2017 – Jan 2019*

- *Masters in Computer Science and Molecular Biology* (GPA 4.6/5.0)
- Thesis with Alex "Sandy" Pentland (MIT Media Lab) on Clinical Trial optimization using Open Algorithms (OPAL) audited by the blockchain. Thesis work has been recognized by the IEEE "Blockchain for Clinical Trials" conference, MIT's School of Engineering "Engineers Revolutionizing Health Care" symposium, and the Blockchain in Healthcare conference
- Teaching Assistant for Introduction to Computer Science, Programming, and Data Science
- *arXiv Preprint: Extractive Summarization of EHR Discharge Notes*
- *arXiv Preprint: Genie: A Secure, Transparent Sharing and Services Platform for Genetic and Health Data*

Massachusetts Institute of Technology: Bachelor of Science — *Sept 2012 – June 2016*

- *Bachelors in Computer Science and Molecular Biology* (GPA 4.7/5.0)

Experience

Secure AI Labs: Co-Founder and *Chief Technology Officer* — *July 2018 – Present*

Privacy preserving analytics platform to protect data and algorithms used in health informatics

- Architects and manages platform
- Assists co-founders in fundraising and customer onboarding
- Advises EFF and ACLU cyber-biosecurity groups
- DEF CON 2018, WEF Davos 2019, Imagination in Action 2019, Harvard Health Catalyst Panel

Genetank: Co-Founder and *Chief Executive Officer* — *Jan 2018 – July 2018*

A decentralized disease risk prediction platform to share profit via smart contracts to provide transparency, security, and equitable remuneration to individuals who contribute their genotypic and phenotypic information.

- Project supported by MIT's Sandbox initiative, and selected by Creative Destruction Lab (CDL) as well as MIT-CHIEF (China Innovation and Entrepreneurship Forum)
- Led legal proceedings, collaboration deals, investor meetings, and conferences (CDL, MIT-CHIEF)
- Engineered bioinformatics platform for ancestry admixture and visualization python, R, token operations through smart contracts initializing machine learning model updates and training (solidity, javascript)

MIT Tidor Lab for Computational and Systems Biology: *Researcher*

- Designed computational chemistry experiments with quantum mechanical methods in QChem with visualized results in PyMOL to discover enzymatic transition-state representations in numerical saddle-points that were consistent with quantum chemical theory — *Mar 2017 – June 2017*
- Modeled viral capsid assembly as a biological network with ordinary differential equations in KroneckerBio MATLAB package. Project showed promise for method of discovering antiviral drugs. — *Sept 2015 – June 2016*

Genexine: *Business Development Intern* — *Aug 2016 – Dec 2016*

- Researched current biotechnologies, organized findings, and presented conclusions on current market trends and business development strategies in both English and Korean
- Modeled valuation on a non-existent market for company's novel immunotherapy for persistent HPV infections, which lead to a successful grant proposal that funded a phase I clinical trial ($10 million)

Medidata Solutions: *Software Engineering Intern* — *June 2015 – Aug 2015*

- Engineered streaming data platform using Amazon Web Services' (AWS) Kinesis, which streamlined backend architecture for greater speed, storage, and analytics on data from wearable devices in Ruby.

Guidewire Software: *Software Engineering Intern* — *June 2014 – Aug 2014*

- Engineered internal Release Dashboard to update development team on platform software release schedule to improve agile development and to use on customer tours. Project used a microservices architecture for scalability and RESTful framework for asynchronous handling in Java.

MIT Gifford Lab for Computational and Systems Biology: *Researcher* — *Sept 2013 – Mar 2014*

- Analyzed genetic data on the differentiation of pancreas progenitor cells using Python in order to visualize transcription factor interactions to help in the treatment of pancreatic diseases.

Leadership and Activities

DEF CON: *Speaker and Organizer*	*July 2018 – Present*
London Marathon 2018: Selected by St. Jude Children's Hospital (6 from 900) for Blockchain charity	*Oct 2017 – Apr 2018*
MIT Eta Kappa Nu (HKN National Honor Society for CS and EE): *Honor Student*	*Sept 2015 – Jan 2019*
MIT Women's Varsity Lightweight: *Rower on First Varsity Eight*	*Sept 2012 – June 2016*
Society of Women Engineers: *Internal Mentorship Chair*	*Sept 2012 – June 2016*
MIT Sigma Kappa: *Sister*	*Sept 2013 – Present*