

# Chia-Tse Kuo (Jonathan)

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## Education

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**City University of Hong Kong (CityU), class of 2021**

***Bachelor of Science in Computer Science – AI & Data Science stream***

- Selected courses: *Artificial Intelligence, Design & Analysis of Algorithms, Problem Solving & Programming, Software Testing & Maintenance, Computational Probability Modeling.*

**National Tsing Hua University (NTHU), 2017-2018**

***Bachelor of Engineering in Mechanical Engineering***

- Awardee of Industrial Innovative Competition on Industrial Design – *X+Spine* (2018).

## Work Experience

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**Siemens Ltd HK, 07/2019 – 03/2020 (9 months)**

***Full-time Intern @ MindSphere Application Center in HKSTP***

- Developed and maintained scalable software platforms for various IoT solutions including Smart Office and Smart City projects with Siemens Mindsphere IoT Operating System (DevOps).
- API integration, development, and testing for multiple IoT devices (backend).
- Designed 2D SVG layout & 3D indoor layout transformation for smart office indoor mapping.

## Skills

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<b>Programming</b>	<b>Proficient:</b> Python   JavaScript   NodeJS (Backend)   MongoDB   Java   Linux   Restful APIs <b>Intermediate:</b> C/ C++   SQL   PHP   Docker
<b>Language</b>	English, Mandarin

## Projects

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**Artificial Intelligence for Classical Music composition in different eras**, supervised by **Dr. Chan, CityU**

- Proposed 2 artificial neural network models, Bi-LSTM & CNN-GAN, to compose classical music in 4 different eras. Most generated pieces have shown valid musical structures and similar composing styles from musicians.

**Boids Algorithm**, supervised by **Dr. Keung, CityU**

- A life simulation on flocking behavior of bird programmed in Java.

## Writings

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**Medium Writer (avg >1500 viewers/ month), 09/2020 – present**

***Writer for The Startup, Towards Data Science, and Analytics Vidhya***

- Genetic Algorithm in Artificial Neural Network
- Artificial Intelligence at Play—Connect Four (Minimax algorithm explained)
- A survey of computer vision in fine-art classification
- Cactus image classification using convolutional neural network (CNN) that reaches 98%+ accuracy

## Award

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**Platinum Award at 2016 Int'l Cyber Fair** – Leader of web development and data analysis.