

## ClusterTech Internship Program 2018 for CUHK Mathematics Department

**ClusterTech Limited** is committed to providing value to clients through advanced computing technologies including Cloud, High Performance Computing, Big Data and Heterogeneous Computing. We provide a comprehensive range of services and products to solve problems in massive data processing, large-scale computing, in-depth analysis, artificial intelligence, and uninterrupted service. Our business areas include financial engineering (investment analysis, risk management, derivatives pricing, etc.), business intelligence (sales forecasting, customer management, inventory management, etc.), environmental science (weather forecast, heavy rain and turbulence forecasting, analysis and prediction of pollution, etc.), smart city (information gathering, information analysis, optimisation and management), and internet applications (massive image processing, video storage and delivery). We also provide public cloud, private cloud and hybrid cloud solutions for businesses of all sizes.

We are now looking for undergraduate students as summer interns or one-year full time interns to assist our Computational Scientists in various data mining, text mining, machine learning and AI projects. For job brief and requirements, please find job descriptions below.

### Intern – Computational Scientist (CS Team, EAG Group)

- **Job Brief**
  - Perform data cleansing and model building in data mining and text mining related applications.
  - Implement software components in business intelligent systems.
- **Requirements**
  - Knowledge in Python or at least one programming language.
  - Basic knowledge in machine learning and statistical analysis.

### Intern – Computational Scientist (CS Team, EM Group)

- **Job Brief**
  - Perform numerical experiments on a new-generation weather prediction model which involves simulating coupled PDEs for the atmosphere.
  - basic knowledge in solving/simulating partial differential equations (PDE) with numerical methods.
- **Requirements**
  - Knowledge in Python or at least one programming language.
  - Basic knowledge in machine learning and statistical analysis.



## Intern – Computational Scientist (ACT Team)

### • Job Brief

- Build data mining, text mining models or machine learning models to solve practical problems in selected industrial sectors.
- Understand business issues and be able to build the appropriate model and algorithms to tackle such issues.
- Sample problems are provided in the next page for reference.

### • Requirements

- Knowledge in Python or at least one programming language.
- Strong analytical skills and mathematics background
- Basic knowledge in one or more of the following areas
  - Mathematical modeling.
  - Algorithms and optimization.
  - Data mining.
  - Text mining.
  - Statistical analysis.
  - Machine learning.
  - Deep learning.
  - Operational research.
  - Marketing analytics.

For summer interns, the internship period will be from June 1 to August 31, 2018. For one-year full time interns, please indicate your availability in your application. Interested parties please send your resume (in MS work / PDF format ) to [recruit@clustertech.com](mailto:recruit@clustertech.com). Please put full position name at the email subject line and please state in your application whether you would like to apply for summer or one-year full time internship.

To understand more about ClusterTech, you are welcomed to visit our website <https://www.clustertech.com/hk/welcome>.

