### **EMPLOYMENT**

# Backend Engineer, Intern Arch17 Aug 2018 – Jan 2019

- Arch17 (based in Shenzhen, China) is a web portal for architecture and construction services, which connects professional suppliers and customers. Arch17 provides B2C, B2B, and C2B online sales service.
- Implemented a pop-up notification system to display the latest activity & updates.
- Extended, maintained a shopping cart system that enables users to purchases online.
- Developed an advanced search engine that helps users explore new furniture.
- Enhanced, maintained the business center system that enables users/stores to add & edit their products.
- Implemented various custom modules to handle Referrer-Redirection, Media Uploading, and Image editing.
- Implemented a blogging system that helps designers explore & Showcase their projects.
- Tech stack: PHP, MySQL, Codelgniter, Git, Linux.

### **EDUCATION**

### Mansoura, Egypt

### **University of Mansoura**

2014 - 2018

- B.Sc., Faculty of Computer and Information Science, Computer Science department.
- Undergraduate Coursework: Operating Systems; Databases; Algorithms; Programming Languages; Comp. Architecture; Artificial Intelligence; Engineering Entrepreneurship; Calculus.
- Projects:
  - Al agent to solve Knights Tour Using IDS Algorithm.
  - Image Processing: Segmentation Using Otsu Threshold Method.
  - Design Programming Language using GOLD Builder System.
  - Simple Video Sharing Website using PHP.
  - NLP tool: text prediction and spelling correction.

#### **SELECTED PROJECTS**

**DeepForecasting**: Stock Market Decision Support System using Deep Learning & Sentiment Analysis.

Tech stack: Python; Keras; PHP; Scikit-learn; Numpy; Pandas; Matplotlib; Textblob.

Arabycia : Arabic NLP tool used to perform Text Search, POS tagging, Translation, and diacritization.

Tech stack: Python, NLTK, Pyaramorph, Tashkeela.

**pystocklib** : Python package to Fetch & Analyze Stock Market data.

Tech stack: Python, Numpy; Pandas; Textblob; Matplotlib.

**StockNN** : Stock Market Prediction Using Neural Network Models.

Tech stack: Python, Numpy; Pandas; Keras.

#### **ADDITIONAL EXPERIENCE AND AWARDS**

- **IbTIECar Innovative Projects:** Shortlisted & Qualified to the Final Round of IBTIECAR2018 competition for the AI and Federated Machine Learning Track. (2019)
- Problem solving: Solved 200+ algorithmic & mathematical problems on multiple online judges.
- Public Relations Volunteer at ACM Mansoura SC. (2016-2017).
- Participated in **Problem solving competitions** SnackDown (2017) & A2OJ Code battle (2017).
- Trainee at PST (Problem solving program for beginners). (2017)
- Summer Internship at ITI Mansoura (Open Source Development) (Jul 2017 Sep 2017)
- Contributed to Falcon & naftawayh. (Open Source Projects)

## **Languages and Technologies**

- PHP; Python; C++; C#.NET; SQL; JavaScript; JQuery; Bootstrap; AJAX; JSON; Django; Keras; Linux; Machine learning; Ruby; Algorithm; Data structure; Web Development; Agile Development.
- Visual Studio; Microsoft SQL Server; Anaconda; XXAMP; phpmyadmin; Git; MySQL Workbench.