

G-11/3, Islamabad, Pakistan

**Zaid Afzal**

(+92) 3065131577  
[zaidafzal@protonmail.com](mailto:zaidafzal@protonmail.com)  
[zaidafzal.com](http://zaidafzal.com)

## EMPLOYMENT

### **Full Stack Developer (Python Django/Flask, NodeJS, ReactJS) & DevOps Engineer**

**Self-Employed @ Upwork (Remote  
Position)**

**March 2019 - Present**

Producing maintainable, thoroughly-tested code, up-to-date with latest industry standards

- Back-End web development using Python Flask/Django, NodeJS using MySQL/PostgreSQL, MongoDB.
  - API design, development & documentation via Flask micro services and Django REST Framework.
  - Scrapping websites and web application for data mining purposes.
  - Test-Driven development.
  - Developing Front-End via HTML5, Bootstrap 4, JavaScript(ReactJS)/jQuery.
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- Working with an Australian startup "Pop Up Wifi LLC" in building their Access Points and server infrastructure.
  - Developed an eCommerce web application utilizing Python/Django, MySQL and AWS.
  - Developed a casino event prediction-er web application utilizing Python (Pandas, Sickit Learn, Django), PostgreSQL and AWS EC2 instance.
  - Worked on Amazon product reviews classification utilizing Python's Pandas, Scrapy and performed various NLP techniques as per client's requirements.

### **Platform Apps Developer**

**Automotive Artificial Intelligence**

**March 2018 - March 2019**

Virtual Simulation for Self Driving Vehicles (Python)

- Worked on virtual simulation's driving, map and traffic maintainer.
- Implemented Rule Catalog for German roads as a separate gRPC service.
- Reduced response time in each frame to compute vehicle perception and rules violation.
- Redesigned modules for simulation and introduced unit test cases for different services.

### **Software Engineer**

**SlashNext**

**Sep 2017 – Feb 2018**

Network Security, Malware Analysis, Reverse Engineering (Python, Objective-C, Bash)

- Worked in cyber security team to transform malware researcher's expertise to machine learning/deep learning models to filter and classify network packets (Benign/Malicious) on Access Point level.
- Created scripts to extract process level information to make important features to train on machine learning algorithms.
- Built and automated virtual machine for Mac OSX, Linux, Windows, Android OS to run and analyse latest malwares.

### **Software Developer Intern**

**Bentley Systems**

**June 2016 – Aug 2016**

Xamarin.Forms, Scrum

- Built working prototype to shift company's internal software system UI named DGnDB to Xamarin.Forms for cross platform support (Android, Windows, iOS).

## EDUCATION

**Islamabad, Pakistan**

**FAST - NUCES**

**2013 – 2017**

- B.S in Computer Science
- Coursework: Data Structures & Algorithms, Web Development, Network & Data Security, Data Mining & Machine Learning

## CERTIFICATIONS

**Coursera.org**

**SUNY - University of Buffalo**

**Feb 2019 (In Progress)**

- Blockchain (specialization)
- Blockchain Basics, Smart Contracts, Decentralized Applications (Dapps), Blockchain Platforms

## TECHNICAL EXPERIENCE

### Projects

- **Algorithmic Trading** (Sep 2016 - May 2017): Final Year Project  
Developed intra-day web based trading platform using historical records of New York stock exchange and trained machine learning algorithms (Random Forest, SVM) to predict price movement for top 5 popular stocks. (Python, Django, AngularJS)
- **TOR Implementation** (Apr 2017 - May 2017): Implemented 'The Onion Routing' protocol on distributed nodes with encrypted and layered communication. (Golang)
- **Messenger** (Nov 2015 - Dec 2015) Developed a messenger combining functionality of multi-lingual auto translated chat, audio and video calling. (Java, JavaFX, JSP, JSF)
- **Pokemon** (Apr 2014 - May 2014): Developed pokemon game in 2<sup>nd</sup> semester of undergrad degree utilizing basic OOP concepts. (C++, OpenGL)

### Languages and Technologies

- (Proficient) Python, Pandas, Flask, Django, C++, MySQL, MongoDB, Git, HTML, CSS/Bootstrap, JavaScript, Linux(Ubuntu), Jira, PyCharm, Scrapy
- (Familiar) AngularJS, NodeJS, Bash, Golang, KnockoutJS, Docker, PostgreSQL