# <u>Structural Engineer, Structural Analyst, Software Developer and Marketing</u> <u>Intern – Earthquake Solutions</u>

Providing state-of-the-art software & services for structural and earthquake engineering.

Location: Tripoli, Lebanon

Experience: fresh graduates are accepted

## 1. Structural Engineer

Major: degree in Civil Engineering, or any related field

#### Major Requirements:

- Develop schematic and detailed design including structural drawings, reports and calculations notes.
- Conduct structural analysis and design, while ensuring compliance with industry standards and codes.
- Conduct seismic design and evaluation of new and existing buildings.
- Collaborate effectively with cross-functional teams to deliver high-quality engineering solutions
- Ensure that all projects progress as planned in order not to cause project delays or budget overruns.
- Perform site visits, inspections and evaluations when needed.
- Develop BOQs, projects cost and required structural component/material quality based on designs.
- Prepare structure's drawings, outline specifications and computer models for building contractors.
- Utilize industry-leading CAD & engineering tools, including ETABS, SAP2000, SAFE, ROBOT,
  StaadPro, AutoCAD, and others.

## Additional Requirements:

- Proficiency in using design and finite element analysis software including ETABS, SAFE, PLAXIS,
  SAP, Robot Structural Analysis, ABAQUS
- Knowledge of American Standards including ASCE 7, IBC, AISC
- Experience in producing 2D/3D structural engineering drawings using Revit and AutoCAD
- Seismic design and analysis
- Structural Concrete and/or Steel Design
- Structural and/or seismic retrofit experience
- Parametric design (Rhino 3D, Grasshopper)
- Programming skills (Python, SQL, MATLAB, C++, ...)

## 2. Structural Analyst

Major: degree in Civil Engineering, or any related field

# Major Requirements:

- Develop finite element models using FEA software such as ABAQUS, LS-DYNA, ANSYS or other.
- Post-processing of the analysis results through automation and data reduction
- Perform structural modelling of buildings, bridges and other structures using structural analysis software such as ETABS, SAP2000, Perform-3D, RISA-3D, RAM Structural System so, SAFE, SP Concrete Design software.
- Conduct building and foundation soil-structure interaction analysis in the time and/or frequency domains
- Perform design checks of structural components for compliance with codes and standards
- Prepare engineering calculations, reports, and presentations for clients
- Review drawings to extract design inputs
- Develop conceptual drawings and sketches
- Assist in project delivery, task management, project management, business development, and proposal developments.

# **Additional Requirements:**

- Proficiency in using design and finite element analysis software including ETABS, SAP2000,
  Perform-3D, SAFE, PLAXIS, SAP, Robot Structural Analysis.
- Proficiency with use of one or more commercial finite element analysis programs, such as:
  ABAQUS, LS-DYNA, ANSYS, GTSTRUDL, SASSI.
- Proficiency with use of computer programming and scripting tools for engineering computations, such as Mathcad, MATLAB, Python, and VBA.
- Knowledge of American Standards including ASCE, IBC, AISC, ACI.
- Experience in producing 2D/3D structural engineering drawings using Revit and AutoCAD.
- Seismic design and analysis.
- Structural Concrete and/or Steel Design.
- Structural and/or seismic retrofit experience.
- Parametric design (Rhino 3D, Grasshopper).
- Programming skills (Python, SQL, MATLAB, C++, ...)

# 3. <u>Software Developer</u>

Major: degree in Computer Science, Computer Engineering, or any related field

## **Additional Requirements:**

- Experience with C/C++, Python, Java.
- Standard Compliant HTML5, CSS, JavaScript and React.
- Proficiency in mobile app development for iOS and/or Android platforms, including experience with Flutter.
- Good knowledge with databases (MSSQL, MySQL).
- Familiarity with data visualization tools.
- OOP and procedural programming methodologies.
- Git Version control (or other version control software).
- Experience with cloud computing platforms such as AWS, Azure, or Google Cloud Platform.
- Familiarity with agile development methodologies.

- Knowledge of machine learning concepts and frameworks such as TensorFlow, scikit-learn or PyTorch.
- Experience working with DevOps tools and practices for continuous integration and deployment.

## 4. Marketing Intern

Major: degree in Business Administration, Marketing, or any related field

## Major Responsibilities:

- Assist in the development and execution of marketing campaigns across multiple channels, including social media, email, and digital advertising.
- Conduct market research and analysis to identify trends, opportunities, and competitive insights.
- Create engaging content for various platforms to attract and retain our target audience.
- Assist with the organization and execution of events, both virtual and in-person, to promote our brand and services.
- Collaborate with cross-functional teams, including design, sales, and product development, to ensure alignment and consistency in messaging and branding.
- Track and analyze the performance of marketing campaigns and initiatives, providing insights and recommendations for optimization.

## Additional Requirements:

- Experience with C/C++, Python, Java.
- Standard Compliant HTML5, CSS, JavaScript and React.
- Proficiency in mobile app development for iOS and/or Android platforms, including experience with Flutter.
- Good knowledge with databases (MSSQL, MySQL).
- Familiarity with data visualization tools.
- OOP and procedural programming methodologies.
- Git Version control (or other version control software).
- Excellent written and oral communication skills (English).
- Strong problem-solving and analytical skills, with the ability to think creatively to find innovative solutions.
- Experience with cloud computing platforms such as AWS, Azure, or Google Cloud Platform.
- Familiarity with agile development methodologies.
- Knowledge of machine learning concepts and frameworks such as TensorFlow, scikit-learn or PyTorch.
- Experience working with DevOps tools and practices for continuous integration and deployment.

## How to apply:

Kindly send your CV and contact the Career Cervices Center, E-mail: <a href="mailto:career.services@balamand.edu.lb">career.services@balamand.edu.lb</a>, Ext: 7801; 7802