

## EMPLOYMENT

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<b>Front-end Developer</b>	<b>EasyInsurance, Pakistan</b>	<b>Dec 2018 - Present</b>
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- Adding Features to the Comparison tool of the Website. Sorting company plans according to the user's preference and implementing other filters.

<b>Student Developer</b>	<b>Processing Foundation, Google Summer of Code - 2018</b>	<b>Apr 2018 - Aug 2018</b>
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- Improved p5.js WebGL mode by implementing arc, point, bezierVertex, curveVertex and quadraticVertex. Worked on some of the issues related to these primitives. Ported Input examples from Processing API to p5.js. Added documentation and test examples.

## EDUCATION

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<b>Islamabad, Pakistan</b>	<b>National University of Sciences and Technology, SEECS</b>	<b>Aug 2014 - June 2018</b>
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- Bachelor of Science in Computer Science with a CGPA of 3.16/4.0.
- Projects for Data Structures, Computer Graphics, Web Engineering, Digital Image Processing, Advanced Programming were chosen among the top projects in class.
- Core Courses : Object Oriented Programming, Data Structures and Algorithms, Computer Graphics, Linear Algebra, Digital Image Processing, Numerical Analysis, Artificial Intelligence, Operating Systems, Database Systems.

## TECHNICAL EXPERIENCE

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- **A.R Based Interior Design** (2018). Android application that allows users to visualize 3D furniture in their room using Augmented Reality. Worked on the backend code for the application which involved selecting a 3D furniture, moving it around the room, removing it using ARCore. **Unity, ARCore, C#**
  - **Pedestrian Detection** (2017). Pedestrian Detection in images using Histogram of Oriented Gradients as the descriptor and Support Vector Machine as the classifier. Wrote descriptor from scratch to understand the underlying concepts. Used scikit-learn to integrate SVM. **PIL, Numpy, Scikit-learn, Python**
  - **Marbles** (2017). Web based Multiplayer retro racing game that enables users to compete with each other in real-time. Worked on collision detection and calculating a player's position with respect to the other player. **Three.js, Socket.io, Javascript**
  - **Mathemagician** (2016). Android app for young children to help them learn and improve elementary mathematical concepts. The app consisted of 6 games for Counting, Addition and Subtraction. Worked on animation, writing logic for all games and designing overall application. **Corona SDK, Lua**
  - **Checkers** (2015). Checkers game against A.I using Minimax Algorithm. Wrote A.I code, game rules and implemented graphics. **SFML, C++**

## EXTRACURRICULAR

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- Taught children how to code using Scratch at a community school in Islamabad as a community service project.
  - Like playing video games, learning/reading new things about Computer Graphics.

## LANGUAGES AND TECHNOLOGIES

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- C, C++, Python, Lua, Javascript.
  - JQuery, Php, MySql, Bootstrap.
  - Git, Unity, Matlab, Visual Studio.
  - WebGL, P5.js, Three.js, ARCore, SFML, PIL, Numpy.