# **ALFRED C. BOWLES**

alfredcbowles@gmail.com www.alfredbowles.com +44.0792.857.9218 | London, United Kingdom

## EXPERIENCE

#### Oct 23' - Present BLACK ENGINEERING

Riyadh, Saudi Arabia

- Successfully managed the end-to-end project lifecycle of the refurbishment and construction of a national Opera house in Riyadh by implemening plans and tracking systems while adjusting strategies as needed for an extremely fast project timeline.
   Established and maintained strong relationships with key project contributors to ensure collaboration between architects, engineers, contractors, suppliers and consultants to ensure seamless communication and project delivery.
  - Leveraged my skills in design, design technology, BIM, timber and steel fabrication and construction to identify issues early on and set clear design requirments and deliverables.
  - Effectively managed and negotiated contracts with suppliers, ensuring timely and cost-effective procurement of materials and services.

#### Oct 22' - Oct 23' XYLOTEK

## **Computational Designer**

London, UK Bristol, UK

- Worked as a computational designer alongside architects, engineers and designers to lead, design and coordinate complex timber structure projects.
- Developed data-driven workflows for design, connection detailing, digital fabrication and installation for large timber and steel structures including pavillions, staircases, walkways and CLT structures.
- Used advanced techinques with grasshopper and python to automate workflows and deliver projects with a fast turnaround.

July 22' - Aug 22' LA MÁQUINA - NOUMENA

#### Barcelona, Spain 3D Printing Assistant

- Developed grasshopper scripts to create custom printing strategies for large scale PLA and biopolymer 3D prints using both WASP delta FDM printers and robotic maniupators.
- Aided in printing, debugging and postprocessing & gained valuable knowledge on non-planar 3D printing, color gradients and mechanical connections.

#### Mar 18' - Jul 21' MAKR SHAKR

Turin. Italv (Base)

Germany

Las Vegas

Spain

France Miami

#### BIONIC BAR - Installations Project Manager

- Tasked to manage all new Robotic Bar installations including those aboard Royal Caribbean's largest cruise ships in the world.
- Coordinated between several large subcontractors, including Kuka Robotics, design firms, and automation companies, as well as the clients in order to execute the planning and realization of the Bionic Bars.
- Managed the worksite installation including all team coordination, logistics, contractor relations and problem solving.
- Managed cost controlling and realized an average of 24% profit at the completion of each project.
- Used AutoCAD, Rhino and SolidWorks to develop the construction drawings and design of specifc components for the bar (including the structural base and pneumatic end-effector of the robot).
- Aided in contract negotiations and managed project timeline scheduling.

#### BIONIC BAR - After Sales & Maintenance Project Manager

- Secured, negotiated and managed robotic bar maintenance and sales contracts worth upwards of 2 Million EUR.
- Traveled on a monthly basis to different parts of the world including, China, Japan, New York, New Zealand, Germany and Spain to manage technician activites and client relations for the Bionic Bar.

• Managed scheduling, logistics, and off-site and on-site repairs of the Bionic Bar by interfacing with local contractors and global clients.

## Jan 20' - Jul 21' CARLO RATTI ASSOCIATI

Turin, Italy (Base) Parma, Italy

Turin, Italy (Base)

**RCC Cruise Ships** 

**United States** 

China

Japan

### Mechanical Designer - R&D Engineer

- Involved in the design, hands-on construction, material supply and deployment of I.C.U container units in under 4 weeks, which included: metal fabrication, aesthetics, HVAC systems, electrical systems, medical gas piping, installation of machinery and medical equipment and the deployment of the first unit at a pop-up Covid-19 hospital in Turin, Italy.
  - Designed a complete BIM model of the I.C.U container on Revit, as well as the 2D As-built drawing set.
- P.M. responsible for design and coordination between contractors, fabricators, architects and client to design, manufacture and install 4 co-axially mechanized Oak doors for a Villa in Parma, Italy.
- Designed and Built several components and peripheral items for the new Robotic Bars such as: cocktail shaker end-effectors, fruit slicers, hydraulic and pnuematic systems as well as a client facing tablet totem.
- Designed and produced an upgraded Robotic Bar concept which emphasised efficiancy and fast drink delivery for a large casino chain in the U.S.

### **Project Manager**

Project Manager - Design Engineer

**Computational Designer - 3D Printing Assistant** 

Project Manager - Dosign Engineer

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## **EDUCATION**

<b>Oct 21' - Jul 22'</b> Barcelona, Spain	mixed reality, computer visior		Advance rication, robotic operation, parametric on ng applied to the AEC sector.		
<b>Sep 12' - Dec 17'</b> Beirut, Lebanon	American University of		Bachelor of Engi	Bachelor of Engineering (BEng.) in Mechanical Engineering	
<b>Sep 98' - Jun 12'</b> Beirut, Lebanon	Adma International S	chool		Scientific Highschool Diploma (Honor's List 2009-2012)	
SKILLS					
	RE & HARWARE: Pythor Illustra TION: 3D Prir with m	3D   Grasshopper   Solidworks   . n   C++   C#   Computer Vision (C tor   Arduino   Raspberry Pi   ROS nting   CNC Machining   RhinoCA anual tools	)penCV)   Photogrammetry   Op 5   KUKAprc		
ENGLISH	-	: ITALIAN	FRENCH	SPANISH	
Mother Ton			INTERMEDIATE	BEGINNER	
HONORS & AWARDS         2020       C.U.R.A Connected Unit for Respiratory Ailments   Team Member         WINNER: ARCHITIZER A+   Architecture + For Good         WINNER: FAST COMPANY   Innovation by Design + Social Good         WINNER: P4G   State-of-the-Art Partnership Awards + Sustainable Development					
EXTRACURE	RICULARS, SPORTS	S & LEADERSHIP			
2012 - 2017	<ul> <li>National &amp; Collegiate Rugby</li> <li>Became the captain of the AUB Varsity Rugby League program, gaining skills in leadership and teamwork.</li> <li>Represented Lebanon in International fixtures against Serbia and Italy.</li> <li>Awarded the MVP award for leading the team to a national victory for the first time in 13 years.</li> </ul>				
2013 - 2017	<ul> <li>13 - 2017 Private Tutoring in Mathematics</li> <li>• Tutored A.U.B students in mathematics courses ranging from Calculus to Higher-order differential equation classes.</li> </ul>				
Other Activities • Skiing, Football, Rockclimbing and Volleyball.					
REFERENCE	S				
	Emanuele Rossetti PhD. CEO Carlo Ratti Associati - Tur +39.334.112.5640 (cell)	Vittorio Cravino Architect & Head of M rin (IT) Makr Shakr - Turin (IT) +39.334.318.9314 (cell)	Noumena - Ba		

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