

Azeem Hussein

Design Engineer & Full Stack Developer

Creative Director/CTO

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My talents reside in bridging the gap from state-of-the-art breakthroughs and applying them to everyday life.

While I am an entrepreneurial generalist, I'm considered a subject matter expert in **3D Printing & Modeling, Biomedical Engineering, High Performance Computing, and Information System Architecture.**

I personally enjoy designing cars & making music.

“Ideas are Cheap, Results are Priceless”

Expertise

Medical Device Design Engineering

Cleanroom Manufacturing & Engineering

FDA, ISO & ASTM Standards

Product R&D/Prototyping

CAE, CFD, and FEA Analysis

3D Scanning, 3D Modeling, & 3D Printing

Robot/Motion Design

Algorithm Generation

E-Commerce

Full Stack Web/App Development

Creative Design, Direction, Conceptualization

Word Play, Marketing, Cognitive Resonance

Process Automation

Data Science

Materials Science

Multi-Dimensional Quantitative Analysis

Realizing ideas; Fruition -- concept to final product

Technology Tools

Engineering & Design: SolidWorks, AutoCAD, Inventor, Rhino, Meshmixer, CAD/CAM, WebGL Content Authoring

Data Science/Algorithm Generation: MATLAB, Mathcad, Blockspring, C++/C#, Python, Visual Basic, OpenCL, AppleScript, Swift, Bash

Web Development: HTML5, SCSS/LESS/CSS3/CSS2, CoffeeScript/JS/JQuery, Ruby on Rails, Sinatra, PHP, Three.js, React, ReactNative, Vue2, Weex, Quasar, Node.js, D3.js, Charts.js, Angular.js, Ember.js

Databases: SQL- MYSQL, POSTGRESQL, SQLITE3 | Graph – Neo4j, GraphQL | NoSql – MongoDB

Infrastructure & Clustering: AWS Fullstack, Heroku pipelines

AI, Machine Learning, Natural Language

Processing, Expert Systems: Alexa, Siri, Cortana, NTLK, LISP, NumPy, OpenOCR

Automation: Sikuli (using Open CV), WinAutomation, Diffbot, Artoo

Robotic Automation: Arduino, ROBODK, Mastercam, Robot Studio

Audio/Video Production: Sony Acid Pro, Sony Vegas, Native Instruments Traktor, FL Studio, Pro Tools, Ableton, Virtual Studio, ASIO, Adobe etc.

Rendering: Keyshot, Modo, Blender

Entrepreneurial Endeavors

IVYN Automotive LLC — New York, NY

Co-Founder/CTO/Co-Owner, 6/2018 to Present.

Solo Dev: Designed and developed new webapp, VM Clusters & Create Docker Containers for applications that interact with clients. Deploy Apps and Ecommerce infrastructure to Production in AWS, Heroku, etc. Develop in house automation solutions with vendor APIs as well as CRM and Sales Team Tools – Plus call center routing and transactional compliance – merchant processing, etc. Users create part requests for rare and hard to find automotive parts and we provide concierge services to procure and guarantee good condition of the part.

Zedtopia LLC — New Hyde Park, NY

Founder/Creator/Owner, 12/2017 to Present.

Zedtopia is a socioeconomic network. Users may share ideas, artwux, events, products, and services, with other users, both privately and publicly. The business model allows for a sortable ad-free feed that actually shows on everything they subscribe to, as well as allows for users to do e-commerce. It provides a social commerce engine.

Jubal Talents LLC — Brooklyn, NY

Co-Founder/CTO, 2/2018 to Present.

Jubal Talents is a platform that screens performers for talent, and allows users to book performers via pre-payment held in escrow such that no talent is ever "stiffed" or "left hanging" as is what commonly happens to young performers... It allows users to share and recommend equipment, rate other performers as colleagues, and build bands, groups, etc, as well as be paid out to the platform of their choice: square cashapp, paypal payments pro, stripe connect, or dwolla.

Full-Time Engineering Experience

Uchiha LLC — Bayside, NY

Senior Full Stack Ruby on Rails Developer, 4/2017 to 11/2017.

Lead development team: Designed and developed new WebApps, VM Clusters & Create Docker Containers for internal consumption, as well as applications that interact with clients. Deploy Apps and Ecommerce infrastructure to Production in AWS, Heroku, etc. Develop in house automation solutions with vendor APIs to create analytics and "big data" analysis of customer transactions, employee/team performance, shop performance, etc.

Promoted to CTO, 7/2017 to 11/2017.

Architect AWS CLUSTERS, Hire Ruby on Rails Developers, Weex Developers (A Vue Native Framework to bypass React Native and GraphQL Stack License issues as recommended by legal counsel). Built In-house applications for business operation, auditing, and more.

IBM — Jericho, NY

Customer Engineer, 4/2013 to 1/2014

Designed, Deployed, and Maintained Unique POS, Logistics, and Warehouse IT Systems, POS servers and corresponding hardware sub-systems for the following IBM Corporate Customers:
JCREW, GAP INC, COSTCO, BJS, KOHLS, BESTBUY, TIFFANYS, GODIVA, USPS, & VERIZON

Slate Hardware & Design — Hollis, NY

Applications & Design Engineer, 1/2012 to 3/2013

Developed new product lines and software customizable CAD templates for mass customization of hardware, door, lock, and household fixture assemblies, to support the manufacture of customized hardware to meet BHMA and ADA standards. These powered a database driven E-commerce shop using Ruby (Spree) & HTML.

Elemental Enterprises — NY, NY

Founder, Design Engineer, 5/2009 to 12/2011

Handle new product concept development, design, testing and simulation to support the manufacture of next-generation medical and surgical solutions complying with federal regulations and quality standards, specifically FDA 510k.

- Implantable Products: Served as design lead on femoral stem and cap product developments that created a lighter, stronger, implant, utilizing EBM-based 3D printing of Titanium (cutting manufacturing costs by 60%) and a first-of-its-kind porous titanium surface that leads to faster bone growth and patient recovery while maintaining continuity with pre-existing bone structure.

Notable Recent Projects

connect.berniesanders.com – RoR Full Stack Developer, Video / Media Production, Web Streaming

December, 2015 – February, 2017

A live online platform officially used by the Bernie Sanders Campaign. Back End Development and Security.

Ref: Masha Mendieta

Justin Montoya Custom Designs – 3D Product Design: Ideation, Engineering, Design, and Manufacturing.

February, 2016 – June, 2016

3D Scanning of Skull/Anatomic Specimens, 3d Modeling Jewelry incorporating the scanned specimens, 3d Printing said 3d models, and Lost Wax/Investment Casting to get a final result that is then polished and sold.

Staffy – RoR Full Stack Developer

August, 2015 – August, 2016

Staffy is a website that uses geolocation in addition to traditional business logic, to provide on demand staffing solutions for brand ambassadors, events, and other hospitality services. I build UIs, databases, and information architectures.

LEVIN SILBERT – Engineering, Design, and Manufacturing of the LUMMA Display Panel System

June, 2015 – April, 2017

Levin Silbert retains me for design and development of interior products, LUMMA Systems, Space Divider Systems, interiors, furniture, lighting components, hardware components, accessories, sliding mechanisms, track and supporting mechanisms. I provide sketches, 3D Renderings, CAD Drawings, Physical Prototypes, 3D Prints, production methods, engineering and structural analysis.

AXELRADNYC – 3D Product Design: Design, 3D Printing & Manufacturing via Lost Wax Casting

April, 2015 – June, 2015

AXELRADNYC is a line of jewelry designed by David Axelrad, and has an exclusive collection for Bloomingdales. I design products and items in master blueprints/3D models for various production methods.

Global 3D Media Holding LTD – Electronics Hardware & Product Design

February, 2015 – April, 2105

Global 3D Media is a 3D Media Company. I was assigned to Product Design and Engineering to create the world's first auto-stereoscopic, glasses-free 3d display overlay. This design is currently being made in China by Tyloo Display.

Headcrack.nyc – Multi-language Ecommerce Platform, Audio Production, Product Design

December 2014 – Present

Headcrack is a premiere, responsive, online shop, geared towards the urban street wear market in NYC. Optimized for conversion, over 5% conversion rate.

Jimmy Choo – Product Design, 3D Rendering, 3D Printing

September 2014 – December 2014

3D modeling to create a mold of Jimmy Choo Anouk Pump from Summer 2014 Collection.

Steelos.com - Ecommerce Platform, Full Stack Development, Product Design

January 2013 – February 2014

Steelos was a responsive social shopping platform, geared towards NYC Men's Fashion. It was considered a new place where the modern man can shop socially and discover creatively. Built with HTML5, JS, and CSS3.

Articulated Automated 8 Axis Robot with Multi-Tool Head for Additive and Subtractive Manufacturing

United States 62008504 (Patent Pending) | Filed June 6, 2014

Unlimit3d – MaaS Platform, RoR/WebGL Full Stack, Systems Architecture, Robotics, 3D Printing

December 2013 – Present

Unlimit3d is a modular online marketplace that utilizes distributed 3D printing, finishing, and robotic assembly nodes to fulfill orders. The platform consists of user-generated products arranged in a decentralized social commerce engine. The aim is to give all people the ability to make things for themselves, or to (quite literally) make their own living by letting users upload, edit, remix, share, license, manage the sale of, and manufacture 3D objects/items/products. We are the first to offer the Manufacturing as a Service Digital Business Model.

Education & Credentials

BOSTON UNIVERSITY, College of Engineering — BOSTON, MA
BS in Biomedical Engineering, Class of 2010 (incomplete – took medical leave)

NEW YORK UNIVERSITY, School of Professional Studies — NEW YORK, NY
MS in Advanced Digital Applications & Product Design, Class of 2017

New Hyde Park Memorial High School
3.77 GPA 2170 SAT (720 Reading, 720 Math, 730 Writing)

Interesting Extracurriculars:

General Manager of WNYT Radio, after being Station Engineer and a live on air DJ there for 2 yrs

Clarinet & Bass Clarinet Player, Percussionist,

Pro DJ for ~8 Years from 14 to 22

Cold Spring Harbor DNA Learning Center – Every Summer from 5th Grade to 10th Grade, I learned genetic engineering in 5th grade and refined the technique over the years, additionally learning gene sequencing, as well as forensics.