Azeem Hussein
Founder, Maker, Designer, Engineer

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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	Technology Tools
Medical Device Design Engineering	**Engineering & Design:** *SolidWorks, AutoCAD, Inventor, Rhino, Meshmixer, CAD/CAM, WebGL Content Authoring*
Cleanroom Manufacturing & Engineering	
FDA, ISO & ASTM Standards	**Data Science/Algorithm Generation:** *MATLAB, Mathcad, Blockspring, C++/C#, Python, Visual Basic, OpenCL, AppleScript, Swift, Bash*
Product R&D/Prototyping	
CAE, CFD, and FEA Analysis	**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, WebVR, AFrame*
3D Scanning, 3D Modeling, & 3D Printing	
Robot/Motion Design	
Algorithm Generation	**Databases:** *SQL- MYSQL, POSTGRESQL, SQLITE3	Graph – Neo4j, GraphQL	NoSql – MongoDB*
E-Commerce	**Infrastructure & Clustering:** *AWS Fullstack, Heroku pipelines, Continuous Integration Systems*
Full Stack Web/App Development	
Creative Design, Direction, Conceptualization	**AI, Machine Learning, Natural Language Processing, Expert Systems:** *Alexa, Siri, Cortana, NTLK, LISP, NumPy, OpenOCR, Tensorflow, Supervised Dataset Creation*
Word Play, Marketing, Cognitive Resonance	
Process Automation	**Automation:** *Sikuli (using Open CV), WinAutomation, Diffbot, Artoo*
Data Science	
Materials Science	**Robotic Automation:** *Arduino, ROBODK, Mastercam, Robot Studio*
Multi-Dimensional Quantitative Analysis	**Audio/Video Production:** *Sony Acid Pro, Sony Vegas, Native Instruments Traktor, FL Studio, Pro Tools, Ableton, Virtual Studio, ASIO, Adobe etc.*
Realizing ideas; Fruition -- concept to final product	
	Rendering: *Keyshot, Modo, Blender*

Entrepreneurial Endeavors

Zedtopia — New Hyde Park, NY
Founder/Creator/Owner, 12/2017 to Present.

Zedtopia is a socioeconomic network. Users may share ideas, artwurx, 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.

Unlimit3d – MaaS Platform, RoR/WebGL Full Stack, Systems Architecture, Robotics, 3D Printing
Founder/Creator/Owner, 12/2013 to 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.

Full-Time Engineering Experience

Common Good — Springfield, MA
Senior Full Stack Ruby on Rails Developer, 2/2023 to 4/8/2023.

Provide infrastructure for Renewable Energy Systems infrastructure, payment services, and vendors. Directly interface with vendors and customers to gather requirements and establish scopes of work for later development sprints.

FLX Systems — Grand Rapids, MI
Senior Full Stack Ruby on Rails Developer, 9/2022 to 1/2023.

Worked on an enterprise EAP solution for Deloitte. The product was a system for managing therapists and other EAP services as contracted by their various enterprise customers.

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 preexisting bone structure.*

Banana Republic — Manhasset, NY
Customer Service, 8/2005 to 9/2006
Assist customers with their clothing and fashion needs.

Staples — Manhasset, NY
Customer Service, 8/2004 to 9/2005
Cashier, Customer Service, Business Machines.

Notable Recent Projects

Articulated Automated 8 Axis Robot with Multi-Tool Head for Additive and Subtractive Manufacturing
United States 62008504 (Patent Pending) | Filed June 6, 2014
For Unlimit3d

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.

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
Took classes towards an MS in Advanced Digital Applications & Product Design in 2012

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

Interesting Extracurriculars:
Music
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

Genetic Engineering
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.