



DESIGNER & DEVELOPER

Hybrid designer and engineer with over 10 years of experience realizing projects from concept to delivery across full-stack, web and mobile. Three years of management experience at Morgan Stanley.

PROFESSIONAL EXPERIENCE

Front End Developer, 2018 – Omission Studios / Girlscouts of America, New York, NY

- Developed prototype application with 20+ screens in React Native including research into integrating ARKit, AWS services and Firebase.
- Created documentation, budgets and schematic designs for an AWS-based microservices backend to support chat, media handling, image processing and more for 1m+ MAUs.

Founder & Full Stack Developer, 2011 to Present – HARTAKI, New York, NY

Provide full stack software and design services for numerous clients. Recent Highlights:

- Developed system for Audi Data Intelligence that creates dynamic audio environments in response to driver behavior using Python and SuperCollider.
- Led web development and technical direction for S'well (swellbottle.com) through all phases from research and design to implementation since company launch in 2011.
- Saved clients countless hours with process automation tools, solving Ecommerce issues related to inventory migrations, customization, digital signatures, SEO using Node and Python.

Geospatial Technology Developer, 2017 - 2018 – COLUMBIA UNIVERSITY, New York, NY

- Developed platform to support community-based mapping for hundreds of initiatives in Middle Eastern cities using Node.js, Express, Angular, Leaflet, MongoDB and Heroku.
- Developed specialized tools to allow realtime geo-spatial data viz, mobile location capture, an AWS-based tile server and responsive multi-lingual front ends.

Project Design Lead for The Brain Index, 2014 - 2016 – COLUMBIA UNIVERSITY, New York, NY

- Led the design from conception through production and final implementation for a large-scale installation featuring leading neuroscience research, robotics, data viz and interactive content.
- Created various 3d models of the human brain extracted from raw MRI data, schematic design and construction documentation for robotics system and interactive games based on neuroscience research that have been exhibited internationally.

Game Designer for Symtactics, 2014 - 2015 – MUSEUM OF MODERN ART, New York, NY

- Designed a physical game produced in an edition of 30,000 and exhibited both internationally and at the Museum of Modern Art in New York City.

Senior Developer Programs Engineer, 2018 - 2009 – GOOGLE, Mountain View, CA

- Contributed over 100,000 lines of code to Python, PHP and Ruby libraries responsible for over 10 million API requests per day and supported strategic partners such as CBS and Facebook.
- Presented at conferences worldwide including Google I/O and authored articles and tutorials accessed by over 300,000 users.

Director of Technology, 2005 - 2007 – BUCKMINSTER FULLER INSTITUTE, Brooklyn, NY

- Led the design and development on multiple websites and technical infrastructure projects using the LAMP stack.

Product Development Lead, 2001 - 2005 – MORGAN STANLEY, New York, NY

- Led 3 teams of contractors through the implementation of over 50 enhancement to a global processing infrastructure spanning America, Europe and Asia regions.
- Developed process automation and reporting tools including software to support firm-wide metrics, regulatory audits and a vault transfer of over \$7 billion in physical securities using Java, C# and IIS.

LANGUAGES

Javascript, Python
PHP, Java, C#, R
HTML/SCSS

TOOLS

Node, Express
Angular, React,
ReactNative,
MongoDB, MySQL
Drupal, Django
Linux, Heroku, AWS
D3, Phaser, Gulp, Webpack

SOFTWARE / METHODS

Git, SVN, Github projects,
Apple Developer, Agile,
Shopify APIs,
Tensorflow/Scikit-learn
(beginner), RStudio,
processing, Unit testing
Unity/VR, Adobe CC (all),
Autodesk Maya,
AutoCAD, Solidworks,
Rhino

EDUCATION

2013

Master of Architecture
Graduate School of
Architecture Planning and
Preservation,
Columbia University, NY
*NYSA Total Excellence in
Design Award*

2000

Bachelor of Fine Art,
Rhode Island School of
Design, Providence, RI
European Honors Program

COURSES TAUGHT

Two graduate level architecture studios at Columbia University and one seminar

Invited Speaker, The New School, New York