

# NICK FAUSTI

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**SUMMARY:** A pragmatic and well-rounded software engineer with 8+ years of dynamic full stack application development experience. MSE from University of Pennsylvania in Computer and Information Science. Roles have encompassed positions in software engineering, applied machine learning, product development, laboratory information management software, natural language processing, and data science. Expert command of a spectrum of programming technologies, development environments, and best practices in object-oriented development and testing. Proven track record of delivering on both planned and unplanned efficiencies. Able to work effectively in team-based environments utilizing the agile development methodology.

## PROFESSIONAL EXPERIENCE:

BRIGHTFIELD GROUP LLC – Chicago, IL (Remote)

### Software Engineer Consultant

June 2017 – Present

- Developed a full-stack single-page application dashboard in React + Django Rest Framework to view analytics information related to natural language processing pipelines
- Integrated various social media APIs into SPA backend
- Worked with vast amounts of data; wrangling, cleaning, and deploying into analytics systems
- Built an NLP topic modeling/machine learning model and pipeline using sk-learn and pandas/pyspark
- Scraped content from the web, regularized, cleaned, and stored in backend to be used in offline machine learning processing
- Built an openCV landing page that takes in user's photos and returns color/mood related information for each image
- Built a marketing landing-page and social login data collection CMS

IQVIA – Plymouth Meeting, PA (Remote)

### Associate Director - Software Engineering — Analytics Center of Excellence

June 2018 – April -2019

- Built an API to expose machine learning models that help facilitate the selection of clinical trial investigator sites
- Created a React front-end to display results and allow users to interactively apply changes to model parameters of ML API

UNIVERSITY OF PENNSYLVANIA – Perelman School of Medicine, Philadelphia, PA

### Sr. Research Programmer – Positive Psychology Center - World Well-Being Project

June 2016 – June 2017

- Developed a single-page application front-end for a personality evaluation tool
- Scraped all hospital reviews from Yelp using Scrapy library to run differential language analysis on
- Ran differential language analysis on multiple hospital characteristics using yelp review language data
- Building web infrastructure to expose internal natural language processing APIs to external researchers

### Application Developer – Center of Excellence in Environmental Toxicology

Dec 2011 – May 2016

- Created a tool to automate the visual selection and data analysis of the calcium signaling fluorescence variation in cells as a result of pharmacological treatments using OpenCV, matplotlib, and Python
- Created a web based mapping and search system with Google Maps to help with the inference of a correlation between healthcare utilization in Northeastern Pennsylvania and hydraulic natural gas fracturing nearby
- Developed a freezer/reagent inventory application with Django, DRF API, and iOS barcode scanning front-end
- Worked as part of a team to create a natural language search system using the Python NLTK library to allow scientists to search medical records, environmental exposure data, and retrieve blood/tissue sample information for those records in plain English queries
- Successfully managed the migration of tissue sample data and participant case report form data into a new laboratory information management system at the proof of concept stage
- Gathered requirements for lab workflows and processes to be used as a model for future data migrations throughout the Perelman School of Medicine/Hospital of the University of Pennsylvania
- Working on creating an ontological framework to be used as a data standard for biomedical investigations throughout the Perelman School of Medicine
- Working on an iOS application for principal investigators to use as a tool to stay informed on the state of various projects/studies and view results from experiments involved with each study

SINGLE THROW INTERNET MARKETING, Wall, NJ

**.NET Application Developer**

Jun 2010 – Nov 2011

- Developed a content management system to offer to new and prospective clients. Allowed our clients with little technical knowledge to make simple content updates to their websites
- Trained clients and Single Throw employees to use the new content management system
- Build and manage web applications and projects using ASP.NET 1.1-3.5 framework
- Supervise a small team of developers that maintain and modify existing sites for over 200 clients
- Variety of skills: C#/VB.NET, ASP.NET Web Forms, Microsoft SQL Server 2005/2008, IIS6/7/, T-SQL, Stored Procedures, XML/XSLT/XPath, JavaScript, jQuery, HTML/CSS, Server/Database Migrations & Deployments

COMCAST CORP., Mt. Laurel, NJ

**Software Test Engineer**

Jan 2010 – Jun 2010

- Manual and automated testing of customer account management software
- Worked with development teams during all code deployments to ensure successful transitions from staging to production environments
- Gained exposure to all areas of the software development life cycle

JOHNSON & JOHNSON – Information Technology Services, Raritan, NJ

**Software Development Intern**

Jun 2008 - Sep 2009

- Created a web form application that greatly increased the productivity of Enterprise Data Backup team members
- Implemented changes and updates to current applications at the request of EDB team members
- Gained invaluable experience working in a team based environment as well as practical technical knowledge

**PERSONAL:**

Eniapp Inc.

Nov 2013 - Present

Founder / Software Engineer

- Started a software consulting company that specializes in web development, NLP, and machine learning
- <https://eniapp.io>

Personal Website: <https://nickfausti.com>

Github Profile: <https://github.com/ncfausti>

**EDUCATION:**

**Master of Science in Engineering - Computer and Information Science**

Sept 2017 - Dec 2020

University of Pennsylvania, School of Engineering and Applied Science, Philadelphia, PA

**BA in Information Technology & Informatics; Economics Minor**

May 2009

Rutgers University – School of Arts and Sciences, New Brunswick, NJ

**CORE SKILLS:**

Python; Java; JS(ES6)/HTML5/CSS3; React; AWS; Google Cloud Services; Web Scraping; Data Science; Machine Learning; NLP, Unreal Engine, Unity, Computer Vision, Deep Learning

**PUBLICATIONS:**

Jemielita T, Gerton GL, Neidell M, Chillrud S, Yan B, Stute M, et al. (2015) Unconventional Gas and Oil Drilling Is Associated with Increased Hospital Utilization Rates. PLoS ONE 10(7): e0131093. <https://doi.org/10.1371/journal.pone.0131093>

Online Ratings of the Patient Experience: Emergency Departments Versus Urgent Care Centers  
Agarwal, Anish K. et al.  
Annals of Emergency Medicine, Volume 73, Issue 6, 631 - 638

**REFERENCES:**

Furnished upon request.