(EJ) VIVEK PANDEY

Senior Full Stack Engineer | Data Scientist | New York City

✉ Email   in Linkedin   ⊙ Github   M Articles

PROFILE

A Senior Full Stack Engineer and Data Scientist with seven years of professional experience specializing in rapid prototyping, web app development, big data analytics, cloud architecture, machine learning, and predictive modeling. Creator of Veniqa, an open-source e-commerce solution which has achieved #1 trending position in Github and HackerNews. Led small engineering teams in fast-paced start-up environments to architect robust and scalable intelligent technical solutions. Worked and consulted for several American Fortune 500 companies. Proficient in a wide range of programming languages, engineering and data science frameworks, cloud computing platforms, and staying up to date on emerging technologies.

EDUCATION

Georgia Institute of Technology   Atlanta, GA
M.S. in Computer Science, Machine Learning Specialization, 3.7 GPA, Anticipated Graduation: Dec. 2022
Coursework: Machine Learning, ML for Trading, Game AI, AI for Robotics, Data & Visual Analytics, Computational Photography

Ramapo College of New Jersey   Mahwah, NJ
B.S. in Computer Science, 3.68 GPA, 2017
Awards: Magna Cum Laude, College Honors Program, Presidential Scholarship, Deans List, Research Honors Awardee
Coursework: Artificial Intelligence, .NET Environment, Database Design, Web Apps, Network Programming, Algorithms

SKILLS

Languages: Python, JavaScript, TypeScript, Java, SQL, GraphQL, C#
Server-side Frameworks: Node.js, Express.js, Meteor, Nest.js, Django, Flask, Serverless, Springboot, .NET
Client-side Frameworks: Angular, Vue.js, ReactJS, React Native, Bootstrap, Material, SCSS, jQuery
Data Science/ML Stack: fastai, Scikit-learn, PyTorch, Pandas, Numpy, Matplotlib, Seaborn, Metaflow, Prophet, Scrapy, Jupyter
Database Systems: MySQL, SQL Server, Oracle, MongoDB
Cloud Computing Platforms: Amazon Web Services, Microsoft Azure
Big Data Technologies: Spark, Hadoop and Hive
Deployment: Dockers, CD/CI Pipelines, Git

EXPERIENCES

Accenture | *Software Engineering Lead & Data Scientist | New York City*   Apr. 2019 - Present

- One of the inventors behind a patent-pending Chargemaster Analytics Platform that has discovered over 300 million dollars so far in potential savings opportunities for a Fortune 25 Healthcare Company identifying irregularities in billing practices
- Led a software engineering team and collaborated with a team of business experts, SMEs, and developers to plan a detailed engineering roadmap, set technical guidelines, monitor progress, and review completed items
- Led a Data Maintenance Team responsible for building robust and automated data pipelines to power business analytics
- Developed change point detection models to perform automatic surveillance of hospital rate changes & billing practices
- Developed scalable backend components & automated services using Python, Node.js, and AWS based stack

Knowledgent | *Software/Big Data Engineer & Technical Lead | Greater New York*   June 2017 - Mar. 2019

- Building highly efficient, fault-tolerant and scalable technical solutions for various Fortune 500 and Global 1000 companies
- Lead UX/UI Engineer responsible for code ownership, design, development and maintenance of a responsive, interactive and intuitive client-side Web App from scratch using Angular 4+ and Node framework - for Kariba, Knowledgent's Enterprise Data Catalog Solution used by multiple health care and pharmaceutical industry leaders
- Developing efficient and robust backend REST APIs in Java Springboot for the Kariba Platform
- Engineering the ETL process, data profiling and exploratory analysis for machine learning models
- Mentoring new engineers, delegating user stories, performing code reviews, and fixing time-sensitive bugs

United Parcel Service | *Software Engineering Co-op | Greater New York*   May 2015 - June 2017

- Designed, developed and tested automated processes and applications using C# .NET framework to save manual efforts on environment configurations, test run scheduling, status notifications, file transfers, network traffic monitoring, etc.
- Developed testing libraries, scripts and other resources using hybrid testing frameworks for API and GUI driven automated regression testing of the UPS's WorldShip Software used by thousands of high-volume shippers
- Designed and implemented a critical automated production system from scratch that validated rating data sent to customers
- Mentored junior co-ops and interns for test case re-engineering, scripting and code reviews

Ramapo College, Virtual Reality Research | *Research Assistant for Dr. Scott Frees | Mahwah, NJ*   Sept. 2014 - Sept. 2015

- Assisted a senior peer in developing and configuring a virtual environment using Unity3D Engine & various VR equipments
- Experimented with hybrid mobility scaling techniques to achieve low simulation sickness in virtual reality navigation

CERTIFICATIONS

- Leading with Analytics & Artificial Intelligence |Northwestern University (Kellogg School of Management)   Nov. 2021
- Certified Machine Learning Specialist |Amazon Web Services   Apr. 2019
- Certified Associate Developer |Amazon Web Services   Aug. 2017

CONSULTING ENGAGEMENTS

A Fortune 25 Healthcare Company | *Senior Full Stack Engineer & Data Scientist | New York City*   June 2019 - Present

Gerdau Ameristeel | *Technical Lead, Big Data and AWS Engineer | Tampa, Florida*   June 2018 - Nov. 2018

Amgen | *Software Engineer | Portugal (Remote)*   Feb. 2018 - Mar. 2018

Scripps Health | *Big Data Engineer | San Diego, California*   Nov. 2017 - Jan. 2018

QBE Insurance | *Big Data Engineer | Australia (Remote)*   Aug. 2017 - Sep. 2017

ENTREPRENEURIAL VENTURES

Veniqa | *Co-Founder, Chief Architect & Engineer* | Website   Sept. 2018 - July 2020

- Open-source e-commerce solution that appeared as a No. 1 trending project worldwide on Github and HackerNews
- Originally a fashion retail startup that served South Asian consumers to shop from luxury western brands
- Chief Engineer responsible for platform architecture, server-side development, devOps engineering and database modeling
- Contributed at least half of the code base for the platform with over 40k lines of server-side code.
- Developed over 90 APIs associated with user and shopping experiences, inventory and order management
- Deployed cloud infrastructure, dockerized the applications, and automated CD/CI pipelines

Technology stack: Node.js, Express.js, Vue.js, MongoDB, Redis, Mongoose ORM, Microsoft Azure, Dockers, Stripe

HONORS & AWARDS

- Honors & Presidential Scholar, Ramapo College of New Jersey
- Mentor & Expo Judge - HackPrinceton 2018, Princeton University, NJ
- Guest Speaker - "How to transition into Data Science", Dataiku NYC (approx. 150 attendees)
- 1st Place (Solo Hack) - RamapoHacks 2017, Ramapo College, NJ
- 2nd Place & Best Medical Hack - LehighHacks 2016, Lehigh University, PA
- Best Use of Mashery API - HACKRU 2014, Rutgers University, NJ
- Featured Song in "The New York Times" Website: On Camera to get off the waiting list - May 11, 2013
- Presenter in three national and four regional collegiate conferences on subjects like Virtual Reality, Digital Footprints & AI
- Guest Speaker for the "EducationUSA (U.S. Educational Foundation) - Get Inspired Talk Series" in 2013 and 2017