

**Objective:** I have over 20 years of professional application development and architecture experience. I'm interested in an ambitious software position that will fully utilize my professional and personal resources, allow gaining new experiences and share my skills and knowledge with the others.

**Technical Skills:**

- Python (Flask, Django, FastAPI, Tornado, Sanic, SQLAlchemy, Alembic) (12 years)
- Infrastructure – AWS, GCP, Azure (13 years)
- Software Architecture (software design, building distributed systems, SAAS) (20 years)
- Java – Spring, Spring Boot, Play, Websphere, JBoss, Tomcat, Akka (20 years)
- Integration, Monitoring and Deployment Tools: Terraform (6 years), Jenkins (10 years), Ansible (8 years), Docker (8 years), Kubernetes (5 years), Elastic Stack (8 years), Prometheus (8 years).
- Messaging: Celery (10 years), Kafka (7 years), RabbitMQ/AMQP (5 years), Samza (2 years)
- Go (12 Years)
- System Administration, Shell Scripting – Debian/Ubuntu, RHEL/Fedora, BSD (20 years).
- Scientific Python: NumPy, SciPy, PyTorch, Pandas, Keras, Tensorflow, Fast.ai, SymPy
- NLP: Spacy, NLTK, Stanford, Stanza, Gensim (6 years).
- Scraping: BeautifulSoup (10 years), Scrapy (10 years).
- Data Science: Mathematical Modeling, Functional Analysis, Multivariate Calculus, Linear Algebra, Statistics, Combinatorics (20 years)
- Front End – Angular, TypeScript, React, Vue (12 years), D3 (5 years), Three.js (5 years)
- Data Engineering - Airflow, Dagster, Snowflake, BigQuery, Redshift, Spark, Flink (10 years)
- NoSQL: Redis (12 years), CouchDB, Mongo (10 years), Neo4J (10 years), Elasticsearch (10 years)
- RDBMS - PostgreSQL (12 years) , Oracle (10 years), MySQL (15 Years), SQL (25 years)
- SOA –SOAP, Axis , gRPC, REST, GraphQL, OAuth2 (Django Rest Framework, Restless, TastyPie, JWT, suds, Apollo) (15 years)
- Security: Kerberos, OpenSSL, SELinux, RSA, LDAP, OAuth2 (10 years)
- Version Control: Git - Github , Bitbucket (12 years), subversion (10 years).
- UX, UI – building and architecting user friendly interfaces (15 years)
- Project Management: Jira, Trello, Bitbucket, Github, Asana (10 years)

**Dmitry Roitman** 150 West End Avenue, Brooklyn, NY 11235 | Phone: 718 404 6471 | [dmitryro@gmail.com](mailto:dmitryro@gmail.com)

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**LANGUAGES:**

- English (full fluency)
- Russian (full fluency)
- Hebrew (full fluency)

**EDUCATION:**

From: 09/1995. To: 08/1999

UNIVERSITY OF HAIFA, Haifa, Israel

Degree: B.Sc in Math and Computer Science

**CERTIFICATIONS:** SUN CERTIFIED JAVA PROGRAMMER

**PROFESSIONAL EXPERIENCE:**

Senior Staff Engineer

Feb 2021 – Now

Legend Energy Advisors, New York, NY

- Architected, developed, documented and designed migration and development process of the corporate analytics platform in newer stack - Angular, Python3, PostgreSQL, Celery, Flask, Django.
- Architected, designed and developed improved features for session management, analytics dashboards, data streaming, including both user interface and the API.
- Architected, designed, developed and maintained RabbitMQ AMQP messaging infrastructure.
- Architected, designed, developed and integrated data visualization tools - dashboards, charts, data analysis interfaces using D3, Three.js, HighCharts, Angular, Pandas, Flask, Django.
- Designed, developed and architected Celery tasks and asynchronous architectures for diverse corporate applications, built IoT / LoRa / Websocket / Itron platform integration.
- Architected, developed and maintained Single Sign On features using Okta and Microsoft.
- Have built several internal applications using Angular and Python3/Celery for company's monitoring needs.
- Designed and developed complex OCR processing pipelines using Pytesseract, PyTorch, Spacy, Dagster.

**Environment:** Angular, TypeScript, Python3, Three.js, D3, HighCharts, Flask, Django, Pandas, SQLAlchemy, PostgreSQL, ELK, Nginx, RabbitMQ, Redis, Celery, Jenkins, Prometheus, Grafana,

Bitbucket Pipelines, Google Cloud Platform, Terraform, Ansible, Zabbix, Prometheus, Docker, Kubernetes, Dagster, PowerBI, Tableau.

## Solutions Architect

Jul 2018 – Feb 2021

### 1010data, New York, NY

- Architected, developed, documented and designed enterprise data pipelining solutions.
- Designed, architected and developed Airflow DAGs, operators, sensors, custom plugins
- Performed major migrations of Flask projects into dockerized versions. Handled Docker orchestration, chose technology stacks, negotiated features, use cases and deliverables with stakeholders.
- Documented and managed migration and development process of Airflow Data Pipelines using Airflow DAGs.
- Designed event infrastructures using Kafka.
- Evaluated third party software solutions for compatibility with current architectural models.
- Conducted research into emerging technologies related to the cloud industry and provided recommendations accordingly.
- Developed technical requirements documents for customer deployments of cloud services.
- Created automated processes to build out infrastructure components quickly and reliably.
- Provided technical support and troubleshooting for customers with complex cloud environments.
- Developed and deployed multi-tier architectures in a cloud environment leveraging automation tools such as Terraform and Ansible.
- Ensured compliance with organizational policies when deploying new services or making changes to existing ones.
- Designed, implemented, and maintained highly available enterprise-level solutions using AWS Cloud technologies.
- Provided guidance on best practices for managing distributed systems across multiple regions.
- Performed regular reviews of existing systems in order to identify areas of improvement.
- Configured network security including firewalls, VPNs, VPCs, and other necessary protocols.
- Monitored system performance metrics to ensure optimal availability and scalability of distributed applications running on the cloud platform.
- Worked closely with stakeholders from various departments to develop innovative solutions that address business goals.
- Optimized existing architecture designs to improve cost efficiency without compromising on quality or reliability standards.
- Maintained up-to-date documentation of all architecture designs and configurations.
- Developed strategies for disaster recovery planning, backup and restore procedures, patch management cycles.
- Managed multiple projects simultaneously while meeting deadlines and budgets.
- Identified potential risks associated with new projects or changes to existing systems.
- Collaborated closely with engineering teams to design end-to-end solution architectures that meet customer needs.

**Environment:** Apache Airflow, Flask, SQLAlchemy, PostgreSQL, ELK, Kafka, Nginx/Gunicorn, Python3, Redis, Docker, Celery, Pandas, Kubernetes, AWS, Java, Scala, Spark, Bitbucket Pipelines, Vue, React, Apollo, GraphQL, Redshift, BigQuery, Snowflake, Tableau

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## Senior Developer

July 2017 – July 2018

Thirstie, New York, NY

- Built a marketplace platform, using Tornado/Django/Celery. Implemented currency and parallelism features (concurrent.futures, asyncio, Celery, RQ, multiprocessing).
- Architected, designed and developed schema and data model for the platform
- Implemented authorization service using JWT. Evaluated prospective use of JWT for SSO.
- Performed extensive business analysis on the deliverables, deadlines, resources, skills, prioritized features and technical tasks.
- Implemented infrastructure, performed DevOps tasks (CI, CD) using Jenkins, Docker, Ansible, Supervisor, Kibana.
- Migrated and configured earlier versions into new infrastructure, codebase and schema.
- Performed legacy data migrations and backups, schema upgrades and maintenance using Pewee, MySQL, yoyo-migrations, Pickle
- Integrated Braintree Payments into the platform
- Implemented third party integration for TaxJar, Twillio
- Performed load and bootstrap time optimizations using data type optimization, schema normalization, Redis optimizations.
- Designed integration layer using gRPC, Celery, RQ.

**Environment:** Tornado, Django, Flask, SQLAlchemy, MySQL, PostgreSQL, gRPC, Digital Ocean, AWS (EC2, S3, ELB, VPC, CloudFront, Elasticache, Elastic Search), Ansible, Nginx/UWSGI/Gunicorn, Python, Redis, Docker, Celery, RQ, React, Apollo, GraphQL, Stylus

## Python Developer / Solutions Architect

January 2015 – July 2017

Art Revolution, New York NY

- Built a Django Rest Framework – based social platform, utilizing Django Rest Framework
- Architected, designed and developed schema and data model for the platform – Django
- Implemented signal-based message queueing using Redis MQ
- Implemented social networking OAuth2 integration (Facebook, Instagram, Google Plus)
- Implemented infrastructure, performed DevOps tasks (CI, Deployment Pipeline) using – EC2, S3, ELB, RDS, Ubuntu configuration and monitoring, Munin, Supervisor, Redis MQ, Ansible, Fabric, Docker.
- Migrated and configured earlier versions into new infrastructure, codebase and schema.
- Implemented media storage and image processing using Django, Go and S3/CloudFront.
- Built image processing tools using Go.
- AI, Machine learning - Performed Image Processing Research for image classifier deep learning network built with Theano, Keras.

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- Built Machine Learning pipelines, built analytical visualizations and charts, performed data analysis using Keras, TensorFlow, Scikit-Learn, Pandas, SciPy, Matplotlib, Pandas-DRF, Scrapy, D3.
- Performed legacy data migrations and backups, schema upgrades and maintenance.
- Integrated Braintree Payments Marketplace into the platform
- Implemented UPS, USPS and DHL integration (Python, SUDS)
- Built a Django Rest Framework-based API providing robust and clean integration of restful JSON endpoints into the client layer (React.JS, D3, Vanilla JavaScript)
- Scraped and aggregated online data using Scrapy
- Performed load and bootstrap time optimizations using data types optimization, schema normalization, PgPool-II and PgBouncer clustering.

**Environment:** Django, Go, Postgres, AWS (EC2, S3, ELB, VPC, CloudFormation, Elasticache), Ansible, Nginx/uwsgi, Python, Redis, Docker, React, Apollo, GraphQL.

Integration Developer / Architect  
Signetcs <http://signetcs.com> New York, NY

Jan. 2014 - Dec 2014

- Built the GEICO B2B integration infrastructure utilizing Python, suds SOAP, Node.js.
- Developed a SOAP-based vendor booking API – a set of corporate endpoints for requests and responses handling, using Node.js, SOAP, Tornado, Twisted, Redis
- Built an architecture of the business integration.
- Built a tcp/redis based job handling functionality
- Data Science – performed log analysis using AWK, Python, Pandas, D3. Built models and performed dataset analysis in terms of those models.
- Configured and programmed system security with Kerberos/OpenSSL/Node.js/Tornado
- System administration – General CentOS configuration, Munin, Supervisor, Redis, Celery, Fabric

**Environment:** Node.js, Nginx, Python 2.7, MySQL, Redis, Tornado, Twisted, SOAP, TCP, Rails 4, Ruby 2.

Senior Developer  
CPX INTERACTIVE <http://cpxinteractive.com> New York, NY

Sep. 2013 – Dec. 2013

- Built a feed aggregating RESTful API, allowing client application to consume feed JSON data.
- Designed and implemented the backend infrastructure (Django, Tornado, Redis)
- Developed the API platform, Django Rest Framework, Twitter API, Facebook API
- Worked on the architecture, functional specs, user stories

**Environment:** Nginx/Gunicorn/uwsgi, Python 2.7, Django, PostgreSQL, Redis, Tornado, AWS.

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**Senior Consultant**  
**Northpoint Solutions, New York NY**

**May 2013 – Aug 2013**

Took part in the redesign of Rotary International Community site – a large scale community site featuring intranets, clubs, map-based club search, group-specific content

- Utilized the full stack of Drupal technology.
  - Took leading part in development of several custom modules.
  - Utilized Organic Groups to implement group membership functionality
  - Utilized Pathauto/i18n to implement internationalization
  - Used Drush/Features to export reusable configurations
  - Performed theming tasks – exporting and theming views, theming pages, email messages, working with SASS and Compass
  - Utilized Form API, webform, Drupal mail, features, taxonomies to implement form interfaces.
  - Implemented SOAP integration of the third party APIs – Netforum, Okta
  - Worked extensively with Google Maps API, GeoIP to implement the club search and location logic
- Environment:** Drupal 7, Acquia Cloud, Netforum VPN

**Developer / Consultant**  
**Analog Method <http://analogmethod.com> New York, NY**

**Feb 2013 – May 2013**

- Performed code refactoring and optimization
- Developed custom modules using Google Maps API and GeoIP to implement locations of the sea teams available
- Performed theming tasks – theming views, pages, email messages
- Utilized Form API, webform, Drupal mail, features to implement interactive form interfaces, including multistep registration, contact forms, inquiry forms and more.
- Implemented SOAP integration of the e-commerce features – box membership (a onetime payment bonus feature for members).
- Performed debugging and maintenance tasks using Drush
- Was using Agile development using Trello, FogBugz, Basecamp, github

**Environment:** Drupal 7, Rackspace Cloud

**Independent Consultant / Freelancer**

**Feb. 2009 – Dec. 2014**

**Dmitry Roitman, New York NY**

Development and maintenance of the following web sites

<http://www.pommrouge.com> (WordPress)

<http://www.ruthgalerealestate.com> (PHP, JavaScript)

<https://www.covenanthouse.org> (Drupal 6) – worked as a freelanced Drupal 6 developer to utilize a non-profit organization site, utilizing Ubercart to accept public donations. Implemented sev-

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eral custom modules customizing Ubercart-based donation process and user membership functionality.

**Java Software Developer**  
**Algorithmic Creations, New York, NY**

**January 01 – Feb. 2009**

- Designed, architected and developed message-driven payment processing for ClickAndBuy
  - Managed Linux infrastructure for corporate Java deployments.
  - Performed diverse integration tasks for APIs, involving web services (customer confirmation API - listing, prices, and other customer-specific info) using Axis 1.4. Used Axis 1.4 to integrate 3<sup>rd</sup> party components into payment system.
  - Performed MySQL 5/Oracle 10g/Hibernate 3 back-end development and schema management
- Environment:** J2EE, Spring, JSF, Hibernate, Axis, MySQL, Oracle, Tomcat, Apache Tomcat, google tools, PayPal API, JavaScript (jQuery).