

Senior Full-Stack Python & Java Developer - Halil İbrahim Küley

Senior Full-Stack Developer with deep Python expertise and Java proficiency. 12+ years building scalable web applications, with the last 5 years focused on Python ecosystems.

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Educations & Official Certifications & Expertise of Areas

- Bachelor's Degree: [Anadolu University](#), Computer and Information Sciences, General 2009 – 2013
- [Oracle Certified Professional: Java SE 11 Developer](#)
- [AWS Certified Solutions Architect – Associate](#),
- [AWS Certified Developer – Associate](#)
- [AWS Certified Cloud Practitioner](#)
- **Principles:** CQRS, SOLID, SOA, OOP,DDD, TDD, REST
- **Backend:** Python & Java
 - o Django and Django REST Framework, Flask, FastAPI, Pydantic, SQLAlchemy, Celery, kafka-python, asyncio, aiohttp, pytest
 - o Java (8, 11, 17), Kotlin, JVM, Java EE/Jakarta EE, JPA, Hibernate, Spring (Core, Boot, MVC, Data, Security, Cloud), JAX-RS, JAX-WS, EJB
- **Utility Libraries:**
 - o NumPy, Pandas, SciPy, requests, python-dateutil, PyYAML, BeautifulSoup, Scrappy
 - o Apache Commons (Lang, IO, Collections,), Guava (Collections, Cache, Primitives)
- **Build Configuration:**
 - o Poetry, pip, setuptools, requirements.txt, pyproject.toml
 - o Maven, Gradle, XML, JSON, YAML
- **Testing:**
 - o pytest, unittest, coverage.py, mock, Locust, Selenium
 - o JUnit, Mockito, Log4j, JMeter, Jacoco, Integration Testing, Unit Testing
- **Cloud & DevOps:** AWS (EC2, EKS, CloudWatch, S3, Lambda, RDS), Docker, Kubernetes, Knative, CI/CD (CircleCI, GitHub Actions, Bitbucket Pipelines), Terraform, Git, GitHub, Bitbucket
- **Brokers & Tools:** Apache Kafka, ActiveMQ, RabbitMQ, AWS SNS, AWS SQS, Linux/Unix, iTerm, VIM
- **Databases:** PostgreSQL, MySQL, MongoDB, Redis, DynamoDB, Snowflake
- **Front-End:** TypeScript, JavaScript (ES6+), React.js, React Hooks, Redux, Saga, Redux-Thunk, HTML5, CSS3, Tailwind CSS, Ant Design, Bootstrap, Figma, jQuery, Vue.js, npm, yarn, Webpack, Vite, Angular 16, RxJS, D3

Work Experiences

Revsolz, *Contractor*

Senior Full-Stack Python & Java Developer

04/2024 - 11/2024

- Maintained and contributed to the development of web applications ([TWM](#), [OWM](#), [FDI](#) and [ML](#)) customized to the specific needs of the [Oil and Gas](#) Industry using python ecosystem(Fast API, Pydantic, Celery, SQLAlchemy)
- Implemented a high-throughput, real-time data pipeline to process and store the massive volume of well data generated by FracSol OWM's wireless sensors, including millions of well and stage type data points per second. Utilized **FastAPI**, **kafka-python**, **avro-python3**, **Kafka**, **Redis**, and **MongoDB** to ensure efficient data ingestion, transformation, and storage for real-time well monitoring and analysis ([OWM-STREAMING](#)).
- Integrated third-party data providers from public oil and gas services in [OWM](#)
- In the [TWM](#), Module Designed and implemented **FastAPI/ Pydantic**-based a bunch RESTful API services to generate custom CSV reports, utilizing complex MongoDB queries to retrieve and transform well-specific data (fract channel values) from a large-scale database with frontend support using Angular, TypeScript and RX.
- Developed unit and integration tests for CSV and all chart APIs (covering well, stage, and wireline data types) to ensure seamless and accurate handling of business logic in [TWM](#) module.
- Developed RESTful APIs with frontend components to visualize frac-channels of stage for selected well in [TWM](#)

- For the new modules in [OWM](#) and [FDI](#), contributed to existing CI/CD pipelines in Bitbucket to automate build and deployment processes for backend and frontend applications, using Docker Compose for configuration
- In the [FDI](#) module, implemented various scheduled jobs to generate CSV reports based on business logic, saving these reports to designated S3 buckets for Oil & Gas clients. Handled thousands of rows per second using **Pydantic** DTO objects, entities, Python Event scheduler and advanced MongoDB queries.
- Developed and contributed to user-friendly interfaces, components, and charts using Angular, RxJS, and TypeScript for all of modules ([TWM](#), [OWM](#), [FDI](#) and [ML](#))

Technical Skills: Python 3.11, Fast API, Pydantic, Celery, NumPy, Snowflake, SQLAlchemy, NumPy, Pandas, SciPy, requests, python-dateutil, BeautifulSoup, Scrapy, PyYAML, pytest, unittest, coverage.py, mock, Locust, Selenium, MongoDB, Redis, Docker-compose, AWS Services (RDS, S3, Lambda, ECS, EKS), Bitbucket Pipelines CI/CD, Apache Kafka, TypeScript, React, Redux-thunk, D3.js, Tailwind CSS

Hologram Sciences, *Contractor*

Senior Full-Stack Python & Java Developer

03/2021 - 05/2024

- Worked in [Health and Wellness](#) industry developing innovative solutions for personalized nutrition, fitness tracking, and health coaching platforms serving 50K+ users across mobile and web applications
- Developed and contributed to key microservices (auth, meal-planning, recommendations) supporting multiple health platforms [Phenology](#) (IOS, Android, Website), [Opti-journey](#) and [d.velop](#) (IOS, Android, Website), using Python ecosystem (FastAPI, Pydantic, SQLAlchemy etc.) , Redis, Kafka, PostgreSQL, TypeScript, React and Redux
- Developed an intelligent meal planning system incorporating:
 - o Complex nutritional calculations and dietary preferences
 - o Restaurant menu analysis and [USDA food database integration](#)
 - o Machine learning-based recipe recommendations ([Open AI powered](#))
 - o Automated meal scheduling with customer preferences
- Web Scraping & Recipe Data Collection
 - o Automated scraping of recipe websites and databases to build meal planning system
 - o Extracting structured recipe data including ingredients, nutritional info, and preparation steps
 - o Experience with parsing HTML/JSON recipe schemas and microdata
 - o Experience with recipe categorization and tagging for dietary preferences
- Built advanced health analytics features:
 - o Real-time weight change forecasting, health assessments, immunity scoring and nutrient tracking
 - o Integration with medical lab results ([Omega Quant](#))
 - o Sleep and activity monitoring with [Fitbit/Apple HealthKit APIs](#)
- Implemented secure payment processing systems for iOS/Android:
 - o Apple App Store and Google Play Store integration, receipt verification and purchase validation
 - o Subscription management and tracking
- Created a modular customer assessment system:
 - o Dynamic questionnaire flow, personalized health recommendations
 - o Integration with e-commerce ([Shopify](#)), Automated coaching responses
- Designed RESTful APIs handling 100+ endpoints for user management, coaching services, and real-time messaging using Apache Kafka, Redis and Python ecosystem
- Implemented CI/CD pipelines using GitHub Actions, streamlining the development process.
- Wrote unit and integration tests using pytest and selenium ensuring code quality and reliability.

Technical Skills: Django and Django REST Framework, Flask, FastAPI, SQLAlchemy, Celery, asyncio, aiohttp, pytest, unittest, coverage.py, mock, Locust, Selenium, PostgreSQL, Snowflake, AWS Services, RDS, S3, EKS, Secret Manager, GitHub actions for CI/CD, Apache Kafka Topic and Redis, TypeScript React, Redux-thunk, React-router, and Tailwind CSS

Ava, *Contractor*

Senior Full-Stack Python & Java Developer

04/2019 - 03/2021

- Worked in [Health and Wellness](#) industry and worked on [AVA](#) (web/IOS/Android)
- Architected and developed core microservices for a health and wellness platform serving 20K+ users
- Built key features and services:
 - o Health data synchronization with [Apple HealthKit](#) and [Fitbit APIs](#) for activity and sleep tracking
 - o Subscription management system integrated with [Recharge](#) and payment providers
 - o Real-time messaging system between coaches and customers using WebSocket
 - o Medical assessment engine with dynamic questionnaire flows
- Implemented secure REST APIs using Django REST Framework for:
 - o User authentication, authorization and coaching session management
 - o Customer profile management, Health metrics tracking (weight, sleep, activity, nutrition)
- Designed and optimized PostgreSQL database schemas for efficient health data storage and retrieval
- Developed and maintained automated web scraping system using Python to extract recipe data from multiple cooking websites, processing over 10,000 recipes monthly
- Created robust data extraction pipelines using BeautifulSoup and Scrapy, handling different website structures and HTML patterns
- Stored structured recipe data in PostgreSQL database with full-text search capabilities for efficient querying
- Created comprehensive test suites using pytest, unittest.mock, coverage.py and Locust achieving nice coverage
- Integrated third-party services:
 - o [Contentful](#) for content management, [Shopify](#) for e-commerce capabilities
 - o AWS services (S3, RDS, EKS) for cloud infrastructure
- Established CI/CD pipelines using CircleCI reducing deployment time by 40%
- Developed React/Redux frontend components for health tracking dashboards
- Implemented data synchronization between mobile apps and backend services

Technical Skills: Django and Django REST Framework, Flask, FastAPI, SQLAlchemy, Celery, asyncio, aiohttp, pytest, unittest, coverage.py, mock, Locust, Selenium, PostgreSQL, Snowflake, AWS Services, RDS, S3, EKS, Secret Manager, GitHub actions for CI/CD, Apache Kafka Topic and Redis, TypeScript React, Redux-thunk, React-router, and Tailwind CSS

Ericsson, *Permanent*

Senior Full-Stack Java Developer

08/2016 - 08/2018

- Contributed to mission-critical enterprise applications for Turkcell, one of Turkey's leading mobile phone operators.
- Designed and developed scalable RESTful APIs for the Turkcell Partner Portal using Spring Boot and Java, enabling partner registration and order management systems that integrate with various internal services. Implemented using Spring Security, JPA/Hibernate, and MySQL.
- Architected and implemented authentication and authorization solutions including SSO integration for Turkcell employees using Spring Security, JWT tokens, and OAuth2 protocols. Integrated with enterprise identity management systems.
- Led backend development for the Turkcell Partner Portal, creating robust monolithic architecture using Java 8+ features, Spring ecosystem, and implementing event-driven architecture using Apache Kafka for real-time order processing.
- Developed core business logic and data access layers for partner management and order processing systems using Java design patterns, Spring Framework's dependency injection, and JPA repositories with MySQL.
- Implemented comprehensive unit and integration testing using JUnit, Mockito, and Spring Test framework. Established CI/CD pipelines using Jenkins and Maven for automated testing and deployment.
- Technical expertise: Java 8+, Spring Boot, Spring Security, JPA/Hibernate, MySQL, RESTful APIs, Microservices architecture, Maven, JUnit, Jenkins, and enterprise integration patterns.

[Proarge](#), full-time

Senior Full-Stack Java Developer

08/2015 - 08/2016

- Contributed to the “Music Content Management Systems” project by implementing and exposing RESTful APIs to major streaming services like Spotify, Apple Music, and [Turkcell Music](#), using Spring Boot and Java technologies.
- In the “Music Content Management Systems” project, developed RESTful APIs to allow content creators to upload, categorize, and edit music tracks along with associated metadata, leveraging Spring MVC and Hibernate.
- Developed user interfaces and modular web components in the “Music Content Management Systems” project, enhancing user interaction and functionality with Java-based frameworks.
- Contributed to the launch of [Kaft.com](#) by designing scalable RESTful APIs that handle over 100,000 transactions per week and by creating user-friendly interfaces with Java-based web frameworks.
- Built automated reporting pipelines using Java, Spring Batch, and complex SQL queries, streamlining detailed report generation.
- Implemented automated deployment processes using shell scripting and Java-based tools, such as Maven and Jenkins, for seamless deployment across production and development environments on Linux.

[ID3](#), full-time

Full-Stack Java Developer

08/2013 - 08/2015

- Played a key role in developing data-river project, [TMAN](#) and [TMAN-MOBILE](#) a ground turnaround management system used by major airlines like [Turkish Airlines \(THY\)](#) and [Pegasus](#)
- Contributed to backend development of airline operations management systems ([TMAN](#) & data-river) using Java/Spring Boot, implementing core features including RESTful APIs for flight operations data and real-time monitoring, authentication and session management, integration with Oracle DB for data persistence, Redis for caching and performance optimization, and ActiveMQ for real-time data streaming.
- Built responsive web interfaces using modern frontend technologies by developing reusable UI components for operational dashboards, creating interactive data visualization for flight reports, implementing secure login and user management features, and integrating frontend with RESTful backend services.
- Engineered hotel management system ([HMAN](#)) used by major airlines by designing and implementing full-stack booking platform with Java/Spring Boot, creating dynamic frontend with comprehensive hotel listings, developing user registration and account management features, and implementing RESTful API integration between frontend and backend.
- Contributed to cross-platform mobile development by developing hybrid mobile application ([TMAN-MOBILE](#)) using Apache Cordova, integrating with backend services for real-time ground operations, implementing offline data synchronization capabilities, and optimizing performance for tablet devices.
- Developed dynamic web pages and reusable components, integrating with RESTful APIs for seamless data exchange between the user interface and server.

[ciceksepeti.com](#), full-time

Full-Stack Software Developer

03/2013 - 07/2013

- Contributed to front-end development at [ciceksepeti.com](#), a major online flower delivery and logistics enterprise, by creating responsive web interfaces for an enhanced user experience.
- Translated design mock-ups into functional web pages using Java technologies, integrating Java-based frameworks with JavaScript, jQuery, HTML, and CSS, aligning with the main website’s aesthetic and functional requirements.
- Developed RESTful APIs to support dynamic data fetching in web components, utilizing Spring MVC alongside AJAX, and participated in sprint planning, retrospectives, and daily stand-ups to align with project goals and team strategies.
- Converted Photoshop mock-ups into functional HTML pages and components, utilizing JavaScript, jQuery, HTML, and various CSS frameworks for the main web site which is ciceksepeti.com
- Implemented RESTful APIs in HTML pages and components to facilitate dynamic data fetching, employing AJAX and Angular.js technologies, and worked closely with team members during on-site meetings for sprint planning, retrospectives, and daily stand-ups.

İyi Fikir Interactive Technologies, full-time

Full-Stack Software Developer

01/2012 - 02/2013

- Contributed to the Yeploca startup project by developing both a mobile app and an admin management panel to support food delivery operations in Istanbul, employing Java and Spring Boot for backend services.
- Developed interactive e-commerce features, including order pages, order history, and user authentication (sign-up and login), using Java, Spring Security, and Thymeleaf for dynamic and secure web pages.
- Created a user-friendly admin panel for product management, implementing intuitive interfaces for product registration, deletion, and updates using Java-based frameworks and JSP (JavaServer Pages).
- Built RESTful APIs with Spring MVC to enable efficient data exchange between the front-end and back-end systems, and used Postman for comprehensive API validation and testing.
- This approach highlights your back-end work with Java and Spring while adapting your front-end contributions for a full-stack Java role.