

## Duru Kahyaoglu

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### SKILLS

**Programming:** C#, Angular, Java, Python, C/C++, SQL, OCaml,

**Application Software:** Visual Studio, Microsoft Team Foundation Server (TFS), Github, AWS CodeCommit, S3, EC2, Jenkins, SQL Server Management Studio, Robo3T (MongoDB), Trello, Jira, SketchUp, PostgreSQL

**Project:** Agile

**Languages:** Turkish (fluent), German (intermediate), Spanish (elementary)

### EXPERIENCE

#### American International Group

New York, NY

*Technology Analyst in Investments IT (Software Architecture and Development)*

January 2019 – Present

- Build and own the product roadmap for a fully automated development pipeline including team's JIRA board, integrations with source control, build and release processes
- Research and find the optimal options for building and hosting company's in-house investment applications by developing POCs using various cloud products including Docker, Kubernetes, EFK stack, AWS and related open source libraries
- Handle communications to build the next generation tools and standards for maximizing developer productivity while minimizing costs, safely storing sensitive data and security concerns
- Design and develop unit testing principles to be practiced by the investments IT team by researching and developing unit tests both for front-end (Karma and Jasmine) and back-end components (Xunit) as well as best practices to set a standard for code coverage and code quality
- Design and implement RESTful APIs (.NET Core) and the necessary front-end capabilities (Angular) for the company's investment and portfolio management web application

*Technology Analyst in General Insurance Reserving (Software Development)*

April 2018 – January 2019

- Design and develop RESTful APIs (.NET Core) and customized data structures following Command Query Responsibility Segregation (CQRS) patterns for microservices architecture to implement the business logic for an actuarial data organization web application
- Example work include upload and download APIs for processing different kinds of claims data in excel, various filter and search APIs and data manipulation functions designed to merge, clone and manipulate data, all designed to run in linear time and process millions of records
- Create customized python scripts to retrieve, restructure and convert records into suitable JSON format and regularly update the data in Dev and QA databases in coordination with the product owner and the SMEs
- Maintain the Dev and QA databases (MongoDB) by updating data and troubleshooting any issue as well as the codebase for bug fixes
- Designed and assisted in the implementation of the CI/CD pipeline for the middle tier and backend component of the application using Jenkins, Sonar and Pivotal Cloud Foundry (PCF) with encryption for the database configuration variables

*Technology Analyst in Business Technology Support (DevOps)*

July 2017 – April 2018

- Utilized Microsoft Team Foundation Server and related tools to support and automate software projects being developed across Consumer, Commercial and Investments IT as well as monitor, upgrade and manage all of the related technical inventory including servers and licenses
- Designed and implemented a fully automated CI/CD pipeline for the frontend, backend and middle-tier components of the company's actuarial reserving and financial modelling application using TFS tools for version control (git), building (Angular 5, .NET Core and MongoDB), testing (XUnit, FakeItEasy, Karma, Jasmine) and deploying (IIS)
- Trained the team responsible for completing daily manual deployment tasks ensuring that the process is SOX 404 compliant
- Worked as the DBA for the company's Global Tax branch, where databases for tax reporting are managed

#### American International Group

New York, NY

*Technology Summer Analyst*

June 2016 – August 2016

- Documented and recommended requirements and specifications, based on in-depth understanding of business objectives, technical environment, project timeline and scope
- Tracked and fully documented changes in functional and business specifications; wrote detailed and easily understood procedures and requirements/specifications

#### Columbia University

New York, NY

*Teaching/Lab Assistant in Signals and Systems Lab*

September 2015 – December 2015, September 2016 – December 2016

- Assisted students with MATLAB programming assignments by teaching the basics of MATLAB and its usage in basic signals and systems processing, assessed students' work and recorded their grades for faculty

#### Asensis Nanotechnology

Ankara, TURKEY

*Software Engineering Intern*

June 2015 - July 2015

- Developed a customized image processing application in C# by implementing mean, median and Gaussian image filtering algorithms to correct the images obtained from an atomic force microscope
- Modified and edited the existing atomic force microscopy software by adding additional features (C++) and making the existing interface more user-friendly

## PROJECTS

### Advanced Software Engineering (Fall 2016) – Vanmo

New York, NY

- Co-developed a web application aimed to teach financial literacy to young adults who are about to get their own bank accounts
- Used Python Flask with HTML, CSS, JavaScript, Bootstrap and SQLite to develop a user-friendly web application with realistic banking functions including transactions among app users and interest accrument

## EDUCATION

### Bachelor of Science – Computer Engineering, Entrepreneurship and Innovation Minor

September 2013 - May 2017

### Columbia University, The Fu Foundation School of Engineering and Applied Science

New York, NY

## LEADERSHIP & ACTIVITIES

### Girls Who Code Mentorship Program at AIG

New York, NY

#### *Mentor*

Present

- Participate in seminars to talk to mentees about college education in CS and career opportunities for college students in the field of technology and finance