# **Cem Gokmen**

Atlanta, GA / Istanbul, TR

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#### **Education**

Georgia Institute of Technology, Atlanta, GA, USA B.Sc. in Computer Science Candidate, GPA: 3.89 Fall 2016 - Fall 2018 (planned)

b.sc. iii Computer Science Candidate, GPA: 3.69

Uskudar American Academy, Istanbul, Turkey

2011 - 2016

#### **Research Interests**

Theoretical computer science, discrete mathematics, randomized algorithms, statistical methods, distributed computing

# **Work Experience**

## **Georgia Institute of Technology**

Research Assistant (8/2017 – present)

I work with Dr. Dana Randall and Sarah Cannon on randomized algorithms for self-organizing particle systems at Georgia Tech's College of Computing. My work includes writing and running simulations to provide empirical evidence for the algorithms we work on, as well as proving properties of our algorithms. I am working full time in this position for Summer 2018.

## **Georgia Institute of Technology**

Vertically Integ. Project Researcher (1/2017 – 12/2017) I worked as an undergraduate researcher on the Airborne Measurements of Atmospheric Electricity project at Georgia Tech's School of Electrical and Computer Engineering under Dr. Morris Cohen, implementing data collection, transmission and analysis.

# **Georgia Institute of Technology**

*Teaching Assistant (8/2017 – Present)* 

I teach labs & recitations, prepare exams and quizzes, and make homework assignments for CS2110 Computer Organization and Programming. Course material includes digital logic, state machines, LC3 assembly programming and hardware-level C programming. Rated 4.74/5.00 for overall effectiveness by students. I was promoted to Senior TA after Spring 2018, and put in charge of planning & supervising course materials, assessments & ed-tech platforms.

# **Divit Digital Video and Image Technologies**

Software Engineering Intern (6/2016 – 8/2016)

I worked on an on-site face recognition-based security system, including a Python backend, an iOS frontend, and an Arduino-based middleware device to intercept RFID card scans.

## **Projects**

Zucchini

A command line grading tool that I developed together with a fellow CS2110 TA that allows for the automation of the submission grading procedure from submission collection to grade entry, also usable as an adapter for autograder platforms like Autolab and Gradescope.

**Coban** Python / Django

A TV series episode aggregator that I built that parses episode URLs from different Turkish TV channels' websites into a single, downloadable RSS feed.

**Particles** 

A simulator that I developed for the self-organizing particle system algorithms produced by our theory group. Ability to design particle systems and run and save simulations through an easy-to-use user interface.

#### **StudentPerformanceAnalysis**

Java / Puthor

A tool for analyzing student performance based on a number of outcome metrics, that I developed for use at the MEF University in Turkey. The project is in use university-wide for learning outcome assessment.

## **Skills**

Java • C • Python • Swift • Lua • HTML • JS • CSS • Django • Flask • SQL • iOS • Arduino • LATEX • Git • Data structures

## Coursework

- Data Structures and Algorithms, Fall 2016, A
- Honors Discrete Mathematics, Spring 2017, A
- Intro to Artificial Intelligence, Spring 2017, A
- Computer Org. & Programming, Spring 2017, A
- Intro to Machine Learning, Fall 2017, A
- Honors Algorithms, Spring 2018, A

#### **Personal Information**

- From Istanbul, Turkey born 1997
- US visa status: Turkish citizen with F-1 visa

Languages: Turkish, English (TOEFL: 116), French (DELF B2: 82%)