ONUR CANKUR

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EDUCATION

Ph.D. Computer Science	**2020 - Current**
University of Maryland, College Park	College Park, Maryland

Advisor: Abhinav Bhatele
High Performance Computing research at Parallel Software and Systems Group.

B.Sc. Computer Engineering	**2015 - 2020**
Hacettepe University	Ankara, Turkey

RESEARCH EXPERIENCE

Research at the University of Maryland   **August 2020 –**

- *Performance analysis of parallel programs.* We develop a tool named Hatchet which can read profiling data from several profiling tools and perform various analyses on that data.
    - *Comparative Evaluation of Profiling Tools.* We compare several profiling tools using Hatchet. A paper submitted to ISC 2022.

TÜBİTAK Project at Hacettepe University   **Oct 2018 – Jun 2020**

- Worked on the research project "Effective and Efficient Parallelization of String-Matching Algorithms Using GPGPU Accelerators and Big Data Frameworks" under the supervision of Prof. Adnan ÖZSOY at Hacettepe University.

Hacettepe DREAM Project   **May 2019 – Jun 2020**

- Worked on the research project "Distributed Data Storage on Blockchain" under the supervision of Prof. Adnan ÖZSOY at Hacettepe University.

PROFESSIONAL EXPERIENCE

University of Maryland   **June 2021 -**
Research Assistant   Maryland, USA

University of Maryland   **January 2021 – May 2021**
Teaching Assistant   Maryland, USA

- CMSC131 – Object-Oriented Programming I

CERN   **Jul 2020 – Aug 2020**
CERN Summer Student (Online due to COVID-19)   Online

ASELSAN   **Dec 2019 – Jun 2020**
Part-Time Software Engineer   Ankara, Turkey

Hacettepe University   **Oct 2018 – Jun 2020**
Undergraduate Research Assistant   Ankara, Turkey

- Effective and Efficient Parallelization of String-Matching Algorithms Using GPGPU Accelerators, and Big Data Frameworks.
- Distributed Data Storage on Blockchain

ASELSAN   **Jun 2019–Aug 2019**
Intern   Ankara, Turkey
- A software version management tool is developed.

Hacettepe University   **Jun 2018 – Aug 2018**
Research Intern   Ankara, Turkey
- Parallelization of String-Matching Algorithms Using GPGPU.

PUBLICATIONS

Journals
J2. Mengü Nazli, **Onur Cankur**, Adnan Ozsoy, **"CUSMART: Parallel String Matching Algorithms Research Tool on GPU"**, Journal of Parallel and Distributed Computing (Under Preparation).

J1. Cangir, Omer F., **Onur Cankur**, and Adnan Ozsoy. "A taxonomy for Blockchain based distributed storage technologies." Information Processing & Management 58.5 (2021): 102627.

Conferences
C1. Nazli, M., **O. Cankur**, and A. Ozsoy. "A Parallel Comparison of Several String Matching Algorithms Employing Different Strategies." Proceedings Book (2019): 52.

CONRIBUTED SOFTWARE

- **Hatchet**: Graph-indexed Pandas DataFrames for analyzing hierarchical performance data.
- **CUSMART (Currently in a private repo)**: A collection of exact string-matching algorithms implemented in CUDA C/C++.

HONORS and AWARDS

- CS Summer Research Fellowship, 2020.
- Dean's Fellowship, University of Maryland, College Park, 2020.
- Graduated with 4th best GPA from Hacettepe University, 2020.
- TÜBİTAK scholarship for undergraduate research assistantship, Hacettepe University, 2018.

CERTIFICATES

CERN Summer Student Programme   **2020**
- Remote due to Coronavirus pandemic (COVID-19).

SKILLS

- C, C++, CUDA, MPI, OpenMP, Python, Charm++, Java, Solidity.
- High Performance Computing, Parallel Programming, Blockchain, Machine Learning, Data Structures, Algorithms, Operating Systems, System Programming.
- Windows, Ubuntu Linux.

LANGUAGES

English   Advanced

Turkish   Native

REFERENCES

Available upon request.