ÇAĞATAY YILDIZ

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Education

PhD in Machine Learning   *September'17 - ...*
Aalto University
Supervisor: Assoc. Prof. Harri Lähdesmäki
GPA: 5.00 / 5.00

Master of Science in Computer Engineering (CmpE)   *August '17*
Bogazici University
Supervisor: Assoc. Prof. Ali Taylan Cemgil
GPA: 3.88 / 4.00

Bachelor of Science in CmpE   *June '14*
Bogazici University
Supervisor: Prof. Tuna Tugcu
GPA: 3.52 / 4.00

Research Interests
- Gaussian Processes
- Stochastic Quasi Newton Techniques
- Bayesian Networks

Research Experience
- *ODE Inference using Gaussian Processes*   *2017 - ...*
- *Stochastic Quasi Newton (Internship at Télécom ParisTech)*   *Summer 2017*
- *Network Attack Detection in VoIP Systems, cooperated with NETAS*   *2015 - 2017*
- *Optimized Newspaper Delivery using Markov Chains*   *2014 - 2015*
- *Network Flow Estimation in Mobile Networks, cooperated with AVEA*   *2014*

Publications
- **Yıldız Ç**, Heinonen M & Lähdesmäki H. (2018), 'A Nonparametric Spatio-temporal SDE Model', NIPS 2018 Spatiotemporal Workshop
- **Yıldız Ç**, Heinonen M**,** Mannerström H, Intosalmi J, & Lähdesmäki H. (2018), 'Learning Stochastic Differential Equations With Gaussian Processes Without Gradient Matching', IEEE International Workshop on Machine Learning for Signal Processing

- Heinonen M**, Yıldız Ç**, Mannerström H, Intosalmi J, & Lähdesmäki H. (2018), 'Learning unknown ODE models with Gaussian processes', International Conference on Machine Learning
- Simsekli U, **Yıldız Ç**, Nguyen T, Cemgil A.T., & Richard, G. (2018), 'Asynchronous Stochastic Quasi-Newton MCMC for Non-Convex Optimization', International Conference on Machine Learning
- **Yıldız Ç**, Bingöl O.H., Irim G, Aktekin B, & Aykut-Bingöl C. (2017), 'A Bayesian Change Point Model for Epileptic Seizure Detection', IEEE Singal Processing and Communications Applications.
- Kurt B, **Yıldız Ç**, Ceritli T. Y., Sankur B, & Cemgil A.T. (2017), 'A Bayesian Change Point Model for Detecting SIP-based DDoS Attacks', Digital Signal Processing
- **Yıldız Ç**, Kurt B, Ceritli T. Y., Sankur B, & Cemgil A.T. (2017), 'A Real-Time SIP Network Simulation and Monitoring System', SoftwareX
- **Yıldız Ç**, Semerci M, Ceritli T.Y, Kurt B, Cemgil A.T. & Sankur B. (2016), 'Change Point Detection for Monitoring SIP Networks', European Conference on Networks and Communications.
- Ceritli T.Y, Kurt B, **Yıldız Ç**, Sankur B, & Cemgil A.T. (2016), 'A Dictionary Learning Based Anomaly Detection Method for Network Traffic Data', International Conference on Machine Learning (ICML) Anomaly Detection Workshop.
- **Yıldız Ç**, Ceritli T.Y, Kurt B, Sankur B, & Cemgil A.T. (2016), 'Bayesçi Çoklu Değişim Noktası Modeliyle VoIP Ağlarda Saldırı Tespiti', IEEE Singal Processing and Communications Applications.
- Kurt B, **Yıldız Ç**, Ceritli T.Y, Yamaç M, Semerci M, Sankur B, & Cemgil, A.T. (2016), 'Olasılıksal SIP Ağı Benzetim Sistemi', IEEE Singal Processing and Communications Applications.

Work Experience

Teaching Assistant at Bogazici University, CmpE Department	*2015 - 2017*
Research Assistant at Bogazici University, CmpE Department	*2015 - 2017*

Teaching Experience

- Data Structures and Algorithms   *Fall'16*
- Introduction to Object Oriented Programming   *Spring'15*
- Introduction to Computer Science: Java Summer School for High-School Students, cooperated with Stanford University Computer Science Department   *Summer'15*
- Data Structures and Algorithms   *Fall'15*
- Introduction to Object Oriented Programming   *Spring'15*

Internship Experiences

- Software Engineer in Hitit Computer Services, Istanbul   *July '13*
- R&D Department at Huawei Technologies Co., Ltd, Istanbul   *August '12*
- Software Developer at Sesam Software Services, Istanbul   *June-July '12*
- IT Department at Bilginc IT Academy, Istanbul   *June '11*

Honors and Awards

- Dean's High Honor List in Graduation of B.Sc.

- Scholarship for Graduate Students by TUBITAK (The Scientific and Technological Research Council of Turkey)
- Winner of a National Competition for Improving Daily Lives of Diabetics: ŞEKERİM, an Android application

Languages
- Turkish (Mother tongue)
- English (Advanced)
  - TOEFL iBT Score: 105/120