STEFAN NICULAE

www.stefann.eu   contact@stefann.eu
/stefan-niculae   Los Angeles, CA

Highlights: Fulbright scholar; 3+ years industry experience; research experience; background in AI, ML and Software Eng.

EDUCATION

MSc Machine Learning & Robotics (3.95/4)	University of Southern California, USA	2018 - May 2020
MSc Artificial Intelligence (9.90/10)	Univ. Bucharest & Leiden Univ., Netherlands	2016 - 2018
BSc Computer Science & Math (9.93/10)	University of Bucharest, Romania	2013 - 2016

EXPERIENCE

Machine Learning Research Intern   **Blizzard**, Irvine CA   summer 2019
- Implemented comparison pipeline for Transformer vs Convolutional performance in model-based Reinforcement Learning
- Presented final results and applications, tailoring them to various audiences, from peers to non-technical stakeholders

Machine Learning Researcher   **Bitdefender**, Romania   (1.3 yrs) 2017 - 2018
- Designed and implemented detection and prevention model pipelines, deployed on all antivirus solutions in EU and US
- Formalized abstract issues into solvable tasks; employed clusterings, embeddings, time series, graphical models
- Cooperated closely with 4 colleagues; participated in architectural decisions; held technical and theoretical presentations

Data Science Researcher   **Adobe**, Romania   (1.2 yrs) 2016 - 2017
- Proposed, researched and presented a next-action predictor for Adobe XD, used in the on-boarding process
- Implemented (end-to-end) the product recommender engine for Adobe BC, currently part of the Premium plan
- Researched an ensemble of heterogenous supervised model for selecting which product features drive retention

Data Science Intern   **Intel**, Romania   summer 2015
- Developed a spike-detection algorithm on CPU statistics, in an interactive web dashboard, for IoT damage prevention

Workshop Facilitator at USC — held series on Data Wrangling & Visualization for 30+ attendees   (2 sem.) 2018 - 2020
Teaching Assistant at Univ. Bucharest — *Formal Methods* and *Functional Programming* courses   (2 sem.) 2015 - 2016
Mobile Game Developer at a Romanian startup — implemented interface and mechanics in a small team   2014 - 2015

SKILLS

Python, Tensorflow, Pytorch • SQL, Hadoop • Javascript, Front-end, Back-end • C#, Unity • Haskell • Java, C++ • Unix
Reinforcement Learning, Natural Language Processing, Computer Vision • Recommender Systems, statistical methods
fast prototyping • apply theoretical models to complex problems • scalable production-ready components
present insights and technical concepts to peers and non-expert audience • cross-team collaboration

PROJECTS

[2019] Intervening in multi-agent RL co-evolution
[2019] Self-driving for camera-enabled model car
[2018] Predicting swearing social media engagement
[2018] Adaptive game difficulty using emotional cues
[2017] Efficient parallel Neural Net implementation

INVOLVEMENT

[2018-20] President of *USC European Students Organization*
[2017] Presented and discussed at the Erasmus+ international project *Development of Intercultural Sensitivity*
[2015] Selected as *Google Student Ambassador;* managed weekly *Student Club*; organized 40-student hackathon

PUBLICATIONS

[AAMAS'19 workshop] Reinforcement Learning vs Genetic Algorithms in Game-Theoretic Cyber-Security
[US Patent, pending] Anomaly detection of user behavior based on raw system action embeddings

AWARDS

[2018-2020] Fulbright Scholarship
[2017] Cornell, Maryland, Max-Planck Research Summer School
[2014-2018] Undergraduate, Graduate Excellence Awards
[2015, 2016] 1st place at Microsoft; Accenture Hackathons