

Martynas Noreika

Education

- 2019–present **PhD in Computing Systems Architecture**, *University of Edinburgh*, Edinburgh, UK
- 2014–2019 **MSci (Hons) Computer Science**, *University of St Andrews*, St Andrews, UK
First Class. Final GPA: 17.4/20
- 2010–2014 **Brandos Atestatas**, *Janonio Gymnasium*, Siauliai, Lithuania
Final GPA: 9.4/10 Modules include: Mathematics, Physics, IT, Chemistry, History
- 2002–2008 **Siauliai 1st Music School**, *Siauliai*, Lithuania
Played Grand Piano and Hornpipe

Research Experience

- 2016–2019 **Research Assistant**, *University of St Andrews*, St Andrews, UK
ViLO - A Visual Interactive Resource for Supporting Self-Guided Learning
Supervisors: Dr Dharini Balasubramaniam and Dr Uta Hinrichs
- Joined a team of researches that explored alternative learning resources
 - Conducted interviews with students to understand how their learning could be enhanced
 - Helped to draft the requirements, designed and developed an interactive web-based supplementary learning tool, which is adopted by students across St Andrews
 - Developed a prototype of a content management system that allows lecturers to edit and maintain the resource content
- Autumn 2018 **Master's Thesis**, *University of St Andrews*, St Andrews, UK
Task Farm Parallel Pattern for FPGA-Based MPSoC Environments
Supervisor: Dr Vladimir Janjic, Co-Supervisor: Prof Kevin Hammond
Achieved grade: 20/20
- September 2017–May 2018 **Bachelor's Thesis**, *University of St Andrews*, St Andrews, UK
Network Science on GPUs Supervisor: Prof Simon Dobson
- Investigated possible implementation approaches of simulating abstract networks in parallel
 - Developed a prototype that is capable of simulating SIR epidemic model on ER networks using a GPU
 - Achieved an average execution time speedup of 87.4 times under certain simulation conditions, when compared to sequential implementations
 - Showed that the solution can be extended to simulate arbitrary models and networks with some limitations
- Achieved grade: 19/20

Conferences and Publications

- December 2018 **ViLO: A Visual Interactive Resource for Supporting Self-Guided Learning**
Dharini Balasubramaniam, Uta Hinrichs, Martynas Noreika and Alasdair Macindoe
Published in *New Directions in the Teaching of Physical Sciences*, 0.13 (2018)
- June 2018 **ViLO: A Visual Interactive Resource for Supporting Self-Guided Learning (poster)**
Dharini Balasubramaniam, Uta Hinrichs, Martynas Noreika and Alasdair Macindoe
Horizons in STEM Higher Education Conference 2018: Making Connections, Innovating and Sharing
Pedagogy 28-29 June 2018, The University of Hull, UK
- October 2017 **ViLO: Visual Interactive Resource For Supporting Self-Guided Student Learning (poster)**
Presented a poster at *SICSA DemoFest 2017: Bringing Research to Life*
3 October 2017, Edinburgh, UK

May 2017 **An Interactive Resource for Learning Programming Concepts (poster)**

Presented a poster at *Good Practise Exchange*
3 May 2017, The University of St Andrews, UK

Industry Experience

Summer 2019 **Software Engineer**, *TalentTicker*, Cardiff, UK

- Worked in a technology team as a full-time engineer
- Developed an AWS Lambda authorizer to support both public and private API calls in AWS ecosystem
- Designed and implemented a service to handle user event tracking and notification delivery via WebSockets
- Utilised AWS Personalize ML models to provide users with suggestions based on their platform usage history
- Introduced gamification features to the platform which enables users to progress and receive awards

Summer 2018 **Software Engineer Intern**, *TalentTicker*, Cardiff, UK

- Joined a team in a technology startup focusing on development of AI solutions for the recruitment sector
- Designed and implemented a prototype system that suggests candidates for a given open vacancy based on how they fit the requirements
- Developed a serverless data processing pipeline in AWS infrastructure to process vast amounts of job vacancies on daily basis
- Implemented a job classification system that helped to cluster and process vacancy data and reduced the amount of manual labour required

Summer 2017 **Technology Analyst Intern**, *JP Morgan & Chase*, Glasgow, UK

- Worked with a team that developed an internal financial product
- Improved a messaging simulator that helped to test components of the system by simulating the remote endpoints according to the business logic
- Reduced development life-cycle by allowing a simultaneous use of integration level tests in the same development environment

Skills

Programming Python, Java, C++, C, JavaScript (ES6, React.js, Node.js, Redux), HTML, CSS, Haskell, \LaTeX
Software CUDA, Cucumber, Vim, Nginx, Git, Mercurial
Languages *Fluent*: English, Lithuanian *Basic*: Russian, Japanese

Positions of Responsibility

University of St Andrews Student Union

2018–2019 **School President**, *School of Computer Science*

Chair of School Student-Staff Consultative Committee

University Educational Committee and School Equality and Diversity Committee member

- Represented students and advocated for their views in the school and university as a whole
- Lead a team of class representatives with a focus on improving teaching quality in the school
- Pioneered an Industry Engagement Program that provided 10 students with an opportunity to work with local technology startups alongside their studies
- Performed a university wide survey regarding issues with existing lecture capture policy and produced a report to the management proposing solutions to mitigate them
- Organised a range of projects: mentoring scheme, careers events, social ball and others

University of St Andrews Engineering Group

2018–2019 **Secretary**

- Organised committee meetings and communicated events and workshops to the students

2017–2018 **President**

- Led a team of seven people that organised teaching and design workshops open to all students
- Managed two engineering projects: high-altitude balloon and racing drones

2016–2017 **Head of Coding**

- Directed a team of developers and physicists to design the electronics module used in the payload of a high-altitude balloon
- Developed a radio system to communicate with the payload module

Referees

Prof Simon Dobson
Head of School
University of St Andrews
School of Computer Science
North Haugh
KY16 9SX, St Andrews, UK

simon.dobson@st-andrews.ac.uk

Dr Dharini Balasubramaniam
Director of Teaching
University of St Andrews
School of Computer Science
North Haugh
KY16 9SX, St Andrews, UK

dharini@st-andrews.ac.uk