Kurt Peek

Curriculum Vitae

Analytical software engineer with a strong background in mathematics and physics

Experience

2018 Software Engineer, Cleolabs Inc.

Cleo (formerly known as LUCY) provides support to expecting parents through a benefits package for family-forward employers. I developed and delivered RESTful APIs for our app and contributed to automating our guides' workflows and building out our case management tools.

2016–2017 Backend Engineer, IperLane Inc.

IperLane (now part of Crowdstrike) built a mobile device management (MDM) system which enabled organizations to protect sensitive data on their employees' mobile devices. I was responsible for the server side of the platform which implemented access control rules and anomaly detection.

2012–2016 **Geophysicist**, NAM B.V. (a Shell-ExxonMobil joint venture).

Contributed to increasing the success rate of exploration drilling by screening prospects for anomalies on 3D seismic indicating the presence of hydrocarbons.

2008 Intern, Thales Netherlands B.V.

Simulated and analyzed novel digital signal processing algorithms to compensate for phase errors in the transmitted signal of frequency-modulated continuous-wave (FMCW) radars.

2006 Intern, Stanford University.

Contributed to efforts to synthesize a thin film of a homolog of a high- T_c superconductor.

Education

2011 M.Sc., Applied Mathematics, University of Twente.

Graduated from the Mathematical Systems & Control Theory (MSCT) group. Coursework included numerical methods, scientific computing, time series analysis, and stochastics.

2011 M.Sc., Applied Physics, University of Twente.

Graduated from the Complex Photonic Systems (COPS) group. Coursework included advanced optics, signal processing, quantum mechanics, and solid state physics.

2007 **B.Sc., Applied Physics**, *University of Twente*.

Taught seminars in mathematics and Matlab. Member of the varsity crew team and later captain of the varsity track team.

Skills

- Extensive experience with Python for web development and RESTful APIs (Django, Flask), mathematical modeling and data analysis (NumPy, SciPy, pandas, scikitlearn), testing (unittest, Pytest), parsing (regular expressions, PyParsing), and web scraping (Scrapy)
- Experience with relational (PostgreSQL), noSQL (RethinkDB), and in-memory (Redis) database systems
- Experience with microservices (Docker, RabbitMQ), continuous integration (Gitlab-CI, CircleCI), and cloud services (AWS, Heroku, Google Cloud, Aptible)

- Experience in web design (HTML5/CSS3, Sass, Javascript (React, jQuery)) and UI frameworks (Bootstrap 4, Materialize)
- o Proficiency in mobile development with React Native

Courses

2017 Algorithms, Coursera (Stanford University).

4-course specialization covering divide-and-conquer methods, graph algorithms, greedy algorithms, dynamic programming, and NP-complete problems.

2016 Machine Learning, Coursera (Stanford University).

Broad course on machine learning covering linear and logistic regression, neural networks, anomaly detection, and dimensionality reduction.