Kurt Peek

Curriculum Vitae

535 Broderick St, Apt 6
San Francisco, CA 94117
✆ *+1 (628) 225-8536*
✉ *kurt.peek@gmail.com*
⌨ *www.kurtpeek.com*

Full-stack engineer interested in solving challenging problems,
learning new technologies, and building cutting-edge products

Experience

2018–2019 **Software Engineer**, *PayPal Inc*.
At Venmo, I contributed to both the backend (a Tornado web server using the Django ORM) and the Android app. Key achievements include:
- Decreased the response time of an API endpoint by 40% by reducing the number of database queries
- Fixed a release-blocking bug in the iOS app
- Set up marketing campaign attribution for deep links to Venmo app

2018 **Software Engineer**, *Cleolabs Inc*.
Cleo provides support to expecting parents through a benefits package for family-forward employers. I developed and delivered RESTful APIs for our React Native app, integrated with third-party APIs, and contributed to our case management tools (in Django).

2016–2017 **Backend Engineer**, *IperLane Inc*.
IperLane (which was acquired by 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 – a Docker Compose multi-container application with a Flask backend – which implemented access control rules and anomaly detection.

2012–2016 **Geophysicist**, *NAM B.V. (a Shell-ExxonMobil joint venture)*.
Increased 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, Tornado), asynchronous processing (Celery, Twisted), and mathematical modeling and data analysis (NumPy, SciPy, pandas, scikit-learn)
- Experience in conceptualizing, developing, and testing native Android applications (in both Java and Kotlin) and reactive programming (ReactiveX)
- Experience with relational (PostgreSQL, MySQL), NoSQL (MongoDB, Cassandra, RethinkDB), and in-memory (Redis) database systems
- Experience with microservices (Docker), message queues (RabbitMQ), cloud services (AWS, Heroku, Google Cloud, Aptible), continuous integration (Jenkins, CircleCI, Gitlab CI), and analytics (Amplitude, Sumo Logic)
- Experience in web development (HTML5/CSS3, Sass, Javascript (React, jQuery)) and UI frameworks (Bootstrap, Materialize)
- Proficiency in mobile app development on iOS (in Swift) and in 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.

Languages

English	Fluent
Dutch	Fluent
Italian	Conversational
German	Conversational