

SKILLS

- **Programming Languages:** Python, Java, Typescript, Go, C++
- **Storage:** Redis, PostgreSQL, MySQL, MongoDB, InfluxDB
- **Web & Mobile:** Dropwizard, Flask, ExpressJs, Drupal, React, Angular, Ionic, Cordova
- **Integrations:** Auth0, Stripe, Twilio, Socket.io, Facebook Graph, LinkedIn
- **Infra & CI/CD:** Concourse, Jenkins, Ansible, Kubernetes, Serverless, Terraform, OCI & AWS services
- **Telemetry & Monitoring:** RabbitMQ, Kafka, Prometheus, Thanos, Grafana, Telegraf
- **Other:** Unreal Engine 5 (VR applications), Blender

EXPERIENCE

Oracle - Redwood City, CA

Principal Software Engineer (Cloud Infrastructure)

May 2022 – Current

- Leads end-to-end development and delivery of core public features in PostgreSQL as-a-service, ensuring high performance, scalability, and reliability for hundreds of thousands of global customers.
- Plays a pivotal role in system and software architecture, implementing and optimizing robust, distributed backend components that align with industry best practices for fault tolerance and availability.
- Conducts comprehensive reviews of technical proposals, feature implementations, performance optimizations, and security compliance to uphold quality standards and ensure alignment with business objectives.
- Mentors and guides team members regarding best practices and technical challenges, fostering a culture of continuous learning, while creating detailed technical documentation, architecture diagrams, and operational runbooks for seamless onboarding and knowledge transfer.
- Provides expert-level customer support, resolves escalated incidents, conducts root cause analysis, and drives long-term solutions, with a focus on improving customer satisfaction and product stability.

Comcast - Philadelphia, PA

Principal Software Engineer

Apr 2018 – May 2022

- Lead the implementation of an internal continuous deployment platform for microservices, network switch configurations and operating system images for touchless mass deployments across thousands of edge locations and millions of customers. Tech stack included Kubernetes, Ansible, Concourse, RDS, DynamoDB, S3, Lambda, Cloudwatch, SQS and frontend components.
- Achieved significant cost reductions (over 80%) on upgrades, planning and incident management operations by automation of complex tasks, implementation of orchestration controls, auto-scheduling and telemetry-based decision making with failsafe mechanisms.
- Documented system architecture and implemented core internal services related to infrastructure as code, inventory automation, network maintenance, troubleshooting and remediation.
- Heavily involved in project planning, resource allocation, code reviews, technical interviews, team growth and internal processes.
- Closely communicated with project stakeholders for feedback, requirements, and backlog management.

Xyntek Inc. - Newtown, PA

Senior Software Engineer

Jun 2016 – Mar 2018

- Architected infrastructure and MEAN applications in the Gig economy domain.
- Designed and implemented core features like in-app payment transactions, chat, and background checks.
- Built CI/CD pipelines and infrastructure for backend APIs, websites and mobile apps.

- Integrated OWASP security in the release cycles and ensured PCI compliance.
- Heavily involved in project scoping, planning, technical documentation and technical proposals.
- Acted as scrum master, conducted training, code reviews and technical interviews.

Research Unit 6 - Patras, Greece

Network Researcher & Software Engineer

Jan 2012 – Jul 2015

- Conducted research on ad hoc networks, quality of service, multimedia streaming and routing protocols in mobile and vehicle ad hoc networks. Implemented and proposed cross layer mechanisms for routing, video streaming and interface-channel switching.
- Implemented various packet routing enhancement algorithms. Written in C++, Python and utilizing the simulators NS-2 and NS-3. Published results in international conferences including IEEE and Springer.
- Executed large scale simulations (up to a few thousand moving nodes) to evaluate the performance of established and proposed routing protocols in mobile and vehicle ad hoc networks.
- Built pipelines for simulation execution, results processing and visualizations. Tooling included scripting, Matlab and Gnuplot.
- Developed internal websites in the Drupal CMS to manage personnel and publications with RBAC.

EDUCATION

Villanova University, Villanova, PA

Aug 2015 – Dec 2016

M.S. Software Engineering - GPA: 3.87

University of Patras, Patras, Greece

Oct 2009 - Nov 2014

B.S. Computer Engineering and Informatics

INTERNATIONAL PUBLICATIONS

- C. Bouras, Kapoulas, V., and Tsanai, E., “**Performance Evaluation of Routing Mechanisms for VANETs in Urban Areas**”, in *Algorithms, Probability, Networks, & Games*. Springer International Publishing, 2015. 133-153. [↗](#)
- C. Bouras, Kapoulas, V., and Tsanai, E., “**A GPSR Enhancement Mechanism for Routing in VANETs**”, in *The 13th International Conference on Wired & Wireless Internet Communications (WWIC' 2015)*, Malaga, Spain, 2015. [↗](#)
- C. Bouras, Gkamas, A., Kapoulas, V., Politaki, D., and Tsanai, E., “**Enhancing video transmission in MANETs utilizing multiple interfaces and multiple channels per node**”, in *5th International Conference on Ad Hoc Networks*, Barcelona, Spain, 2013. [↗](#)
- C. Bouras, Kioumourtzis, G., Gkamas, A., Kapoulas, V., Politaki, D., and Tsanai, E., “**Evaluation of video transmission in emergency response ad - hoc networks**”, in *4th International Conference on Data Communication Networking - DCNET 2013*, Reykjavik, Iceland, 2013, pp. 27-35. [↗](#)
- C. Bouras, Gkamas, A., Kapoulas, V., Politaki, D., and Tsanai, E., “**Evaluation of Routing Protocols for Video Transmission over MANETs that use Multiple Interfaces and Multiple Channels per node**”, in *19th IEEE International Conference on Networks (ICON 2013)*, Singapore, 2013