



# Johan Backman

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 [github.com/barreyo](https://github.com/barreyo)

## Education

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<b>MSc Computer Science, Chalmers University of Technology</b>	<b>Aug 2016 - Aug 2018</b>
<b>BSc Software Engineering, Chalmers University of Technology</b>	<b>Aug 2012 - Jun 2015</b>

## Experience

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<b>Software Engineer / AI Researcher, Bracket Computing</b>	<b>Dec 2017 -</b>
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- Reinforcement Learning research focused on autonomous cyber-threat response using Bayesian Attack Graphs formulated as a POMDP
- Developed NetBSD kernel code in C, and user-space Python services that communicated with a Kubernetes-based control plane
- Debugged and improved Go code in micro-services on Kubernetes
- Publishing and maintaining an open source OpenAI environment for threat defense research. [github.com/barreyo/gym-threat](https://github.com/barreyo/gym-threat)

<b>Software Engineering Intern, Bracket computing</b>	<b>Jun 2015 - Jun 2016</b>
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- Redesigned the whole Continuous Integration pipeline using Docker on Jenkins
- Built a testing framework in Python, that made it easy to write generic tests to test the product across AWS, GCE and on-premise VMWare
- Wrote end-to-end integration and performance tests
- Collaborated with the development team on test plans and requirements

<b>Software Engineer, Freelance</b>	<b>Apr 2015 - Jul 2015</b>
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- Designed and developed the embedded software for a low-cost road sign that shows the current speed of passing vehicles, bikers and pedestrians using radar technology
- Mocked the hardware features of the custom-designed hardware to create regression tests

<b>Vice Business Area Manager, Chalmers Teknologkonsulter</b>	<b>Jan 2014 - Jun 2014</b>
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- Managed 18 software engineers
- Mainly in charge of sales, strategic development and training
- Increased the time consultants were assigned to billable projects, which lead to an increased business area revenue by 80%

**Software Engineer Consultant, Chalmers Teknologkonsulter**

**Sep 2013 - Feb 2015**

- Embedded development in C on custom-designed BLE hardware
- Developed the core technology, OTA updates over Bluetooth, charging and battery management
- Developed an Android application to debug Bluetooth connections

## **Technologies**

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**Languages:** Python, Haskell, C, Erlang, Rust, Go, Java, GLSL

**Other:** Docker, Git, TensorFlow, AWS, Bash, GNUMake, GCE, OpenGL, Android