

# Nahim EL ATMANI

CS engineer student  
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## EDUCATION

### EPITA

#### MS IN COMPUTER SCIENCE

Expected feb 2017 | Paris, France  
Majoring in real-time and embedded systems

#### BS IN COMPUTER SCIENCE

2015 | Paris, France  
Conc. in Software Engineering

### GRIFFITH COLLEGE

Jan - May 2014 | Dublin, Ireland  
Conc. in Software Engineering  
Exchange semester

## COURSEWORK

### STUDENT RESEARCHER

#### SYSTEM AND SECURITY LAB (LSE)

Jan 2015 - Present | EPITA, France  
low level • kernel projects • Open Source contributions (strace) • SPI flash emulator • talks such as virtio, GCC plugins, MIFARE ultralight contactless cards • tooling such as call tracing, libc function call seeker • Gcov reimplementations

### GRADUATE

Jan 2012 - Present | EPITA, France  
C/UNIX project like malloc, myKVM, myHTTPd, 42sh (POSIX shell) • OS concepts • Unix Tools and Scripting • device emulation w/ Xvisor

## SKILLS

### PROGRAMMING

C • Python • Go • x86 Assembly

### TOOLS

Git • gdb • GNU Make • perforce (previous exp.) • quartus (previous exp.)

### LANGUAGES

French (native)  
English (proficient, TOEIC 970/990)

## EXPERIENCE

### ARISTA | KERNEL TEAM INTERN

Sept 2015 – Dec 2015 | Vancouver, Canada

- Backport of compatibility and stability patches
- Development of a fuzzer tailored for switches UART driver (Python)
- Open research project on direct memory access optimizations (C)

### PROTEGO | SOFTWARE ENGINEERING INTERN

June 2014 – Aug 2014 | Antony, France

- Data center migration (VM farm creation + live VM transfer)
- Tooling to speed-up network information gathering (Powershell)
- Network congestion analysis

### EPITA | TEACHER & TEACHING ASSISTANT

Sept 2014 – Today | Paris, France

- Teaching kernel courses (interrupts, PIC, IDT, userland, fs, ...)  
<https://k.kse.epita.fr>
- Teaching assistant in the system & security week (buffer/heap overflow, format string, ROP..., ELF manipulations)
- C# Teaching assistant for first year students (basic programming & OO concepts)

## RESEARCH & PERSONAL WORK

### GSOC 2016 | STRACE

May 2016 – Present | Paris, France

Add a syscall fault injection in Strace; reduce memory footprint.

### LSE | RESEARCH PROJECTS

Jan 2015 – Present | Paris, France

- SSA tree manipulation using GCC Plugin to produce compilation time obfuscation
- Virtio implementation for a small & modular kernel in the lab  
<https://lse.epita.fr/projects/stos.html>
- Ltrace variant that aim doing what does ltrace do but for internal function calls (use IDA & PIN)
- Low level and security talks (monthly & annually)  
<https://lse.epita.fr/laboratory/events.html>

### SPARE TIME

- CTF security challenges (solving & making exercises)  
<https://ctftime.org/team/757>
- Sports, urban exploration

## LINKS

🌐: Naam • [in](https://www.linkedin.com/in/naam9): naam9 • [🐦](https://twitter.com/brokenpi_pe): @brokenpi\_pe • [🌐](https://github.com/brokenpi): brokenpi.pe