

# The IoT Hacker's Handbook

A Practical Guide to Hacking  
the Internet of Things

Aditya Gupta

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# **The IoT Hacker's Handbook: A Practical Guide to Hacking the Internet of Things**

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# About the Author

**Aditya Gupta** is the founder and CEO of Attify, Inc., a specialized security firm offering IoT penetration testing and security training on IoT exploitation. Over the past couple of years, Aditya has performed in-depth research on the security of these devices including smart homes, medical devices, ICS and SCADA systems. He has also spoken at numerous international security conferences, teaching people about the insecurity in these platforms and how they can be exploited. Aditya is also the co-author of the *IoT Pentesting Cookbook* and the author of *Learning Pentesting for Android Devices*.

# About the Technical Reviewer

**Adeel Javed** is an intelligent automation consultant, an author, and a speaker. He helps organizations automate work using business process management (BPM), robotic process automation (RPA), business rules management (BRM), and integration platforms.

He loves exploring new technologies and writing about them. He published his first book, *Building Arduino Projects for the Internet of Things*, with Apress back in 2015. He shares his thoughts on various technology trends on his personal blog ([adeeljaved.com](http://adeeljaved.com)).

# Acknowledgments

This book could never have been finished without my amazing team at Attify, who poured in their day and night to make sure that we produced quality content as a team.

# Introduction

The ten chapters of this book cover a number of topics, ranging from hardware and embedded exploitation, to firmware exploitation, to radio communication, including BLE and ZigBee exploitation.

For me, writing this book was an exciting and adventurous journey, sharing my experiences and the various things I have learned in my professional career and pouring everything into these ten chapters.

I hope you can make the most out of this book and I would highly encourage you to take all the skill sets learned in this book and apply them to real-world problems and help make the Internet of Things (IoT) ecosystem more secure. It is individual contributions that will help us create a safer and more secure world, and you reading this book can play a part in that.

No one is perfect, and this book is bound to have a minor error or two. If you encounter any of those mistakes, let me know and I would be happy to correct them in future editions of *The IoT Hacker's Handbook*.

I also teach three-day and five-day training classes on offensive IoT exploitation, which I would encourage you to attend to get hands-on experience with everything covered in the book. For more information about the online training and live classes, feel free to check out [attify-store.com](http://attify-store.com).

The last and the most important part is community! For you, the reader, I want you to be willing enough to share your knowledge with your peers or even with someone who is new to this field. This is how we, as a community, will grow.

## INTRODUCTION

That is all from my end. Again, thanks for reading *The IoT Hacker's Handbook* and I wish you all the best for your IoT exploitation endeavors.

Aditya Gupta (@adi1391)  
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