

# POLITECHNIKA WROCŁAWSKA

## WYDZIAŁ ELEKTRONIKI

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KIERUNEK: Automatyka i Robotyka (AIR)  
SPECJALNOŚĆ: Embedded Robotics (AER)

## PRACA DYPLOMOWA MAGISTERSKA

Embedded Linux  
build systems

Systemy implementacji  
wbudowanego Linuxa

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*To my wife and son*



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# Chapter 1

## Introduction

### 1.1 Goals of the project

The goal of this project is to explore, compare and extend embedded Linux build systems.  
[1]

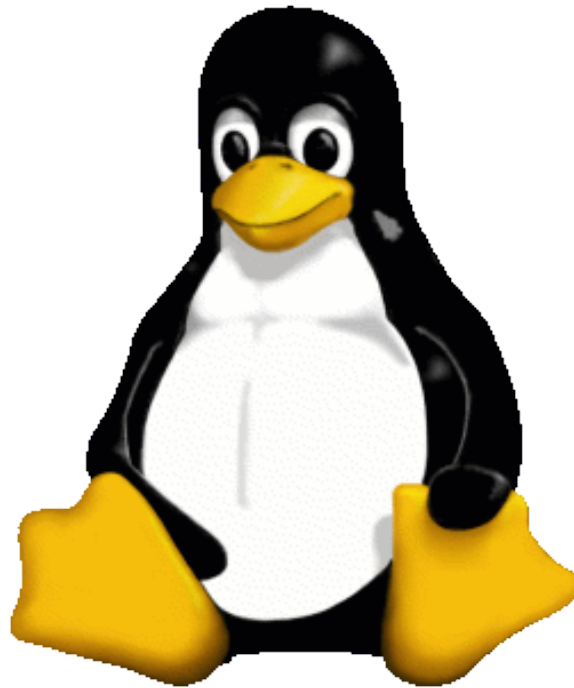


Figure 1.1: Penguin Tux - Linux mascot





# Chapter 2

## Literature review

2.1 [elinux.org](#)

2.2 [wikipedia.org](#)

2.3 Marcin Bis

2.4 [official documentation](#)



# Chapter 3

## Development boards

3.1 Grinn liteboard

3.2 BeagleBone Black

3.3 PandaBoard

3.4 Wandboard Quad

3.5 Raspberry Pi 2 Model B



# Chapter 4

## Build systems

- 4.1 Build system vs Linux distributions vs Distribution Creators
- 4.2 Linux From Scratch
- 4.3 Buildroot
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- 4.5 Yocto Project
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# Chapter 5

## Software

5.1 POSIX Test Suites

5.2 Node.js and IoT

5.3 CAN and CANopen

5.4 MIPI CSI and OpenCV





# Chapter 6

## Methodology

6.1 Build servers

6.2 Data storage



# Chapter 7

## Conclusions



# Bibliography

- [1] M. Bis. Linux w systemach embeded. <http://bis.org.pl/en:start>, 2013. [Online; access 2017-01-01].



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