Princeton University
COS 217: Introduction to Programming Systems
IA-32 Architecture

Memory Chip

CPU Chip

Control Unit

Arithmetic Logic Unit (ALU)

Registers

EAX

EBX

ECX

EDX

ESI

EDI

EBP

ESP

EFLAGS

EIP

...

00000000

The
Program
Break →

argc

argv

...

argv array

env var array

...

argv strings

env var strings

FFFFFFFF

TEXT

RODATA

DATA

BSS

HEAP

STACK