# Introdução às Redes de Comunicação

## Sockets UDP: palavras-chave essenciais

SOCKET **socket**(int af, int type, int protocol); /* PF_INET, SOCK_DGRAM, IPPROTO_UDP*/

**struct sockaddr_in** a; /* a.**sin_family**, a.sin_addr.**s_addr** e a.**sin_port** */

…**htons**(…);

…**htonl**(…);

…**ntohs**(…);

…**ntohl**(…);

int **bind**(SOCKET s, const struct sockaddr *name, int namelen);

unsigned long **inet_addr**(const char *cp);

char* **inet_ntoa**(struct in_addr in);

int **setsockopt**(SOCKET s, int level, int optname, const char *optval, int optlen);
/*
** level = SOL_SOCKET, optname = SO_RCVTIMEO
** optval = (char *)&timeoutMsec (DWORD timeoutMsec;)
*/

int **sendto**(SOCKET s, const char *buf, int len, int flags, struct sockaddr *to, int tolen);

int **getsockname**(SOCKET s, struct sockaddr *name, int *namelen);

int **recvfrom**(SOCKET s, char *buf, int len, int flags, struct sockaddr *from, int *fromlen);

int **WSAGetLastError**(void); /* WSAETIMEDOUT */

SOCKET_ERROR

INVALID_SOCKET

int **strcmp**(const char *s1, const char *s2);

char * **strcpy_s**(char * strDestination, int sizeStrDestination, const char * strSource);

int **closesocket**(SOCKET s);